The Architects' JOURNALLA ARCHI



standard contents

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

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HC

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A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to H one week, I to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address,

١	AAI	Architectural Association, 34/6, Bedford Square, W.C.1. Association of Art Institutions. Secy.: W. Marlborough Whitehead, Castle Hill Avenue, Berkhampstead, Herts.	Museum 0974 "Dyneley,"
١	ABS ABT ACGB	Architects' Benevolent Society. 66, Portland Place, W.1.	Welbeck 5721 Victoria 0447-8 Sloane 0421
١	ADA APRR		Mayfair 7501/8 Euston 2158-9
١	ArchSA	Architectural Students' Association. School of Architecture, Manche Municipal School of Art, All Saints, Manchester, 14	
١	ARCUK ASB	Architects' Registration Council. 68, Portland Place, W.1. Architectural Science Board of the Royal Institute of British Architectural Place, W.1.	Welbeck 9738
١	ASW	Association of Scientific Workers. 15, Half Moon Street, Piccadilly,	
١	BAE BATC	Board of Architectural Education. 66, Portland Place, W.1. Building Apprenticeship and Training Council. Lambeth Bridge Ho	Welbeck 5721
ı	BC	Building Centre. 9, Conduit Street, W.1.	Mayfair 2128
ı	BCC BCCF	British Colour Council. 28, Sackville Street, W.1. British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13.	Regent 3613
ı	BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
ı	BDA	British Door Association. 25, Victoria Street, S.W.1.	Abbey 5422-3
1	BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2. To	
ı	BGC	British Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
ı	BGF	British Gas Federation. 1, Grosvenor Place, S.W.1.	Sloane 8266
ı	BIA British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.		2.
ı	DEAD		w Central 2891
ı	BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
ı	BINC	Building Industries Distributors. 52, High Holborn, W.C.1. Building Industries National Council. 11, Weymouth Street, W.1.	Chancery 7772 Langham 2785
1	BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140
ı	BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 2246
ı	BSA British Steelwork Association. Eggington House, Buckingham Gate		
1	BSA		Mayfair 0515
ı	BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
ı	CAS	County Architects Society. C/o A. Guy Chant, F.R.I.B.A. Salop County Council, 5, Belmont, Shrewsbury. S	hrewsbury 3031
1	CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
	CIAD	Copper Development Association. Kendals Hall, Radlett, Herts. Central Institute of Arts and Design. C/o National Gallery, W.C.2.	Radlett 5616 Whitehall 2415
1	CIAM	Congres Internationaux d'Architectures Modernes. Doldertal, 7. Zuri	ch, Switzerland
	CPC	Council of Industrial Design. Tilbury House, Petty France, S.W.1. Codes of Practice Committee. MOW, 42, Onslow Gardens, S.W.7.	Whitehall 6322 Censington 7070
١	CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.	
	CUJC	Coal Utilization Joint Council. 54, Victoria Street, S.W.1.	Victoria 9851
١	DIA	Design and Industries Association. 9, Conduit Street, W.1.	Mayfair 5432
1	DOT	Department of Overseas Trade. 35, Old Queen Street, S.W.1.	Victoria 9040
1	EC		emple Bar 7565
	EJMA	English Joinery Manufacturers Association (Incorporated). Sackvill 40, Piccadilly, W. English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
	FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns.,	S.W.1. Sloane 2837
	FASSC	Federation of Association of Specialists and Sub Contractors.	Whitehall 9606
	FBI FC	21, Tothill Street, S.W.1. Federation of British Industries. 21, Tothill Street, S.W.1. Forestry Commission. 25, Savile Row, W.1.	Whitehall 6711
	FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.	W.1. Sloane 1002
	FDMA	Flush Door Manufacturers Association. Stapleford Road, Trowell	
	FLD	Friends of the Lake District. Pennington House, Nr. Ulverston, La	
	FMB	Federation of Master Builders. 26, Great Ormond Street, Holborn	, W.C.1. Chancery 7583
	FRHB	Federation of Registered House Builders. 82, New Cavendish Stree	t, W.1. Langham 4041

FS (Eng.) Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.

Georgian Group. 27, Grosvenor Place, S.W.1.

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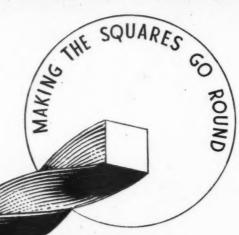
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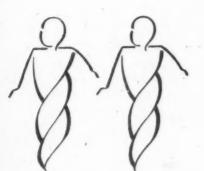
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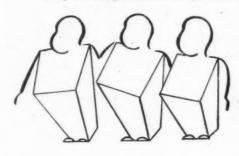
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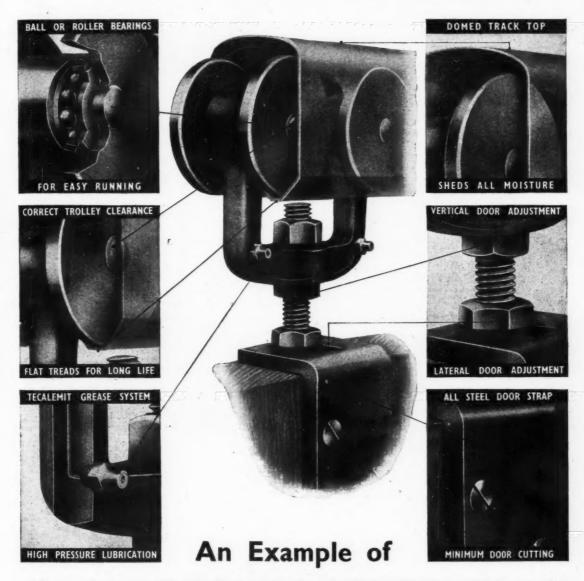
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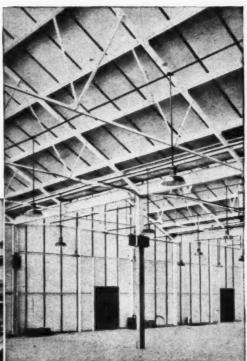
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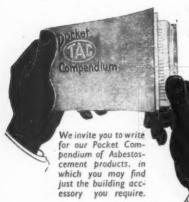
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ROMAN POTTERS SPREAD THE CRAFT

The cities of Etruria in the west and Greek colonies in the south of Italy imported Athenian pottery between about 750 and 550 B.C. Local potters subsequently imitated the painted Greek wares but their productions gradually deteriorated in design and technique. Generally speaking, the Romans had little aptitude for the art of painting.

The development of the late Hellenistic technique of relief-moulding in the so-called "Samian" wares was unquestionably Rome's outstanding contribution to the art of the potter. The best of these wares (known as Arretine, after Arretium, the chief centre of manufacture) are of smoothly-finished coral-red earthenware, coated with a hard thin glaze of still undetermined composition, and decorated in relief with mythological and hunting scenes, friezes and medallions. The

designs—often inspired by goldsmiths' and silversmiths' work—were cut in plastic clay moulds or impressed from revolving tools or "runners", the beauty and accuracy of their finish revealing excellent craftsmanship.

More elaborate relief decorations were hand-modelled and applied to plain vases thrown on the wheel. Excellent undecorated bowls, cups and other domestic pottery were also made. Many Roman pots were stamped with the maker's name, the name of the pottery and the date, and on some of the glazed "Samian" ware the dipper's thumb-marks are still clearly visible today. Among more unusual uses the Romans made of pottery were terra cotta tickets, money boxes, coin moulds and an astonishing variety of lamps for domestic and ritual use.

Through the Romans, the arts of

throwing and relief-moulding spread north of the Alps, eventually reaching Britain, where Roman and Romano-British kilns have been found in many districts. "Samian" pottery was imported in large quantities from Gaul and elsewhere, but there were British centres of manufacture also-such as Colchester. Roman pots made at Caistor, in Northamptonshire, are particularly interesting for their vigorous slip decorations in relief, depicting gladiatorial combats, chariot races and deer hunts. The burnished black pots made at Upchurch, in Kent, are noteworthy for their fine shapes.

In Egypt, under Roman rule, an important development was the combination of relief-moulding with a rich yellow lead glaze or a lead glaze stained with copper to produce a deep green.



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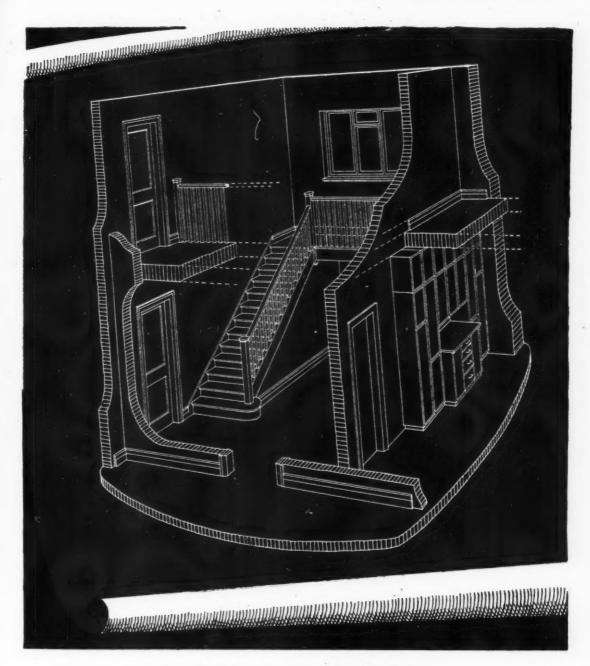
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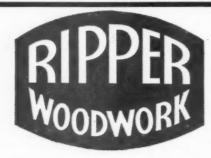


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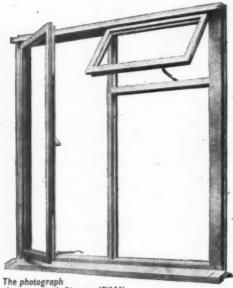


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like Eskimos in their igloo.

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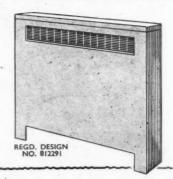
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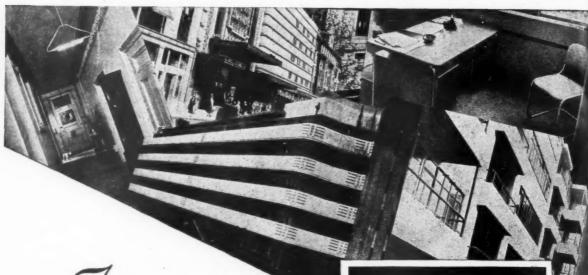
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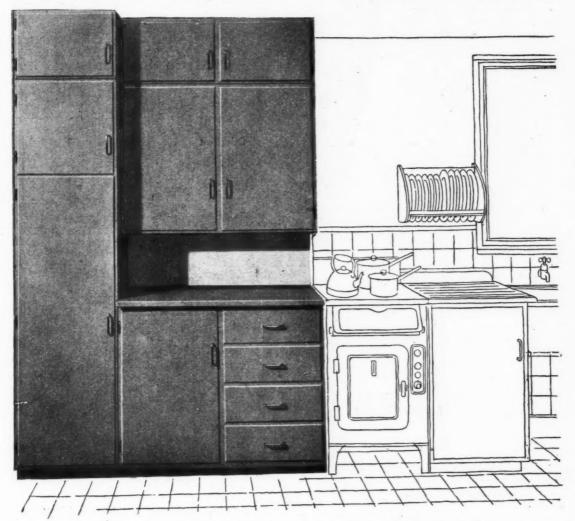
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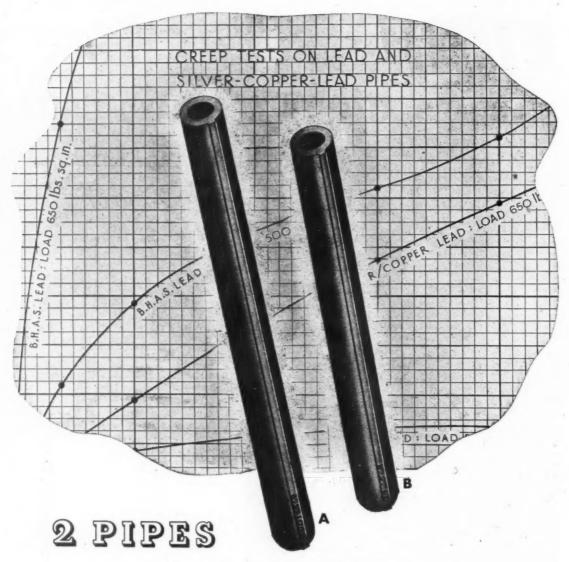
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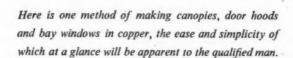
5

THE FLASHING MYSTERY

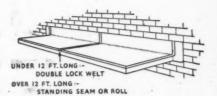
We could swear that if you were to write down the pro-

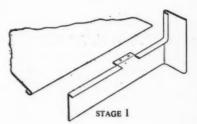
perties wanted in a flashing material, what you wrote would be a pretty close description of copper. And yet (here's the mystery) plumbers don't always use it for flashings.

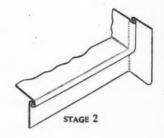
After all—take durability. You will not find a more durable metal than copper. Or efficiency. What is more secure against wind and weather? Economy? Well, 26 s.w.g., for any flashing, costs less than 18.7d. per square foot, even now. Ease of installation? This is so important, it calls for an actual example:



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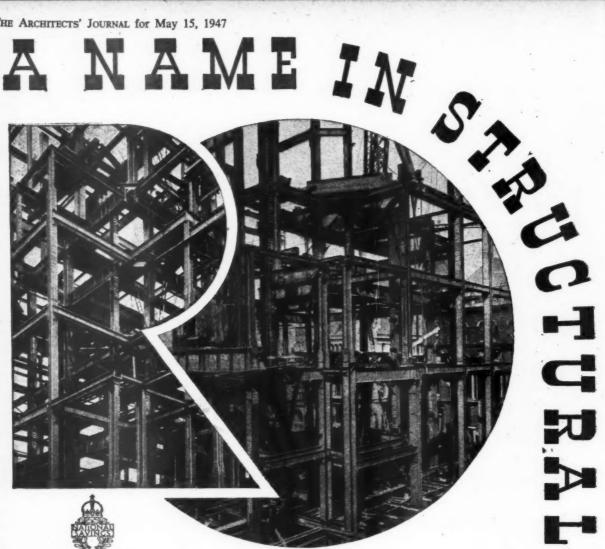






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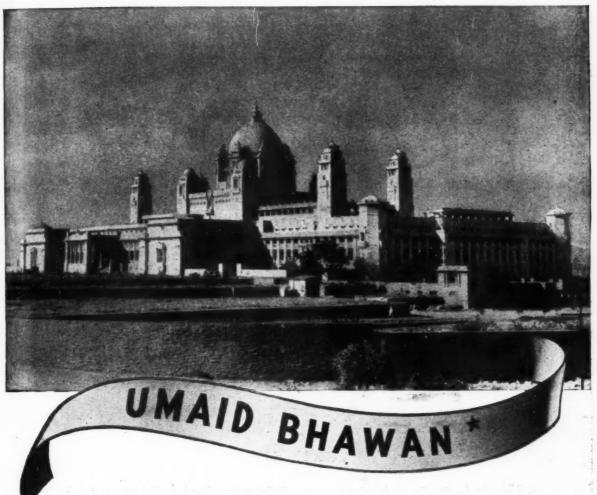
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COVENTRY: BRITANNIA WORKS, PAYNES LANE.

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SOUTHAMPTON: 4 ROCKSTONE PLACE.

xxvi



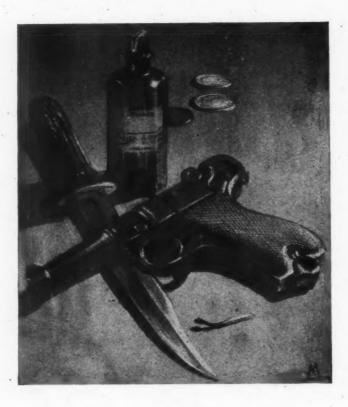
This immense and luxurious edifice, the Palace of H.H. The Maharaja of Jodhpur, possesses the intriguing name of Umaid Bhawan, and stands on the Chittar Hill in the State of Jodhpur. It is fitting that for the electrical installation of this imposing Palace, Henley Cables were used exclusively as in many other famous buildings in India.



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★ UMAID BHAWAN may be freely translated as "The Palace of the present Ruler of Jodhpur State".

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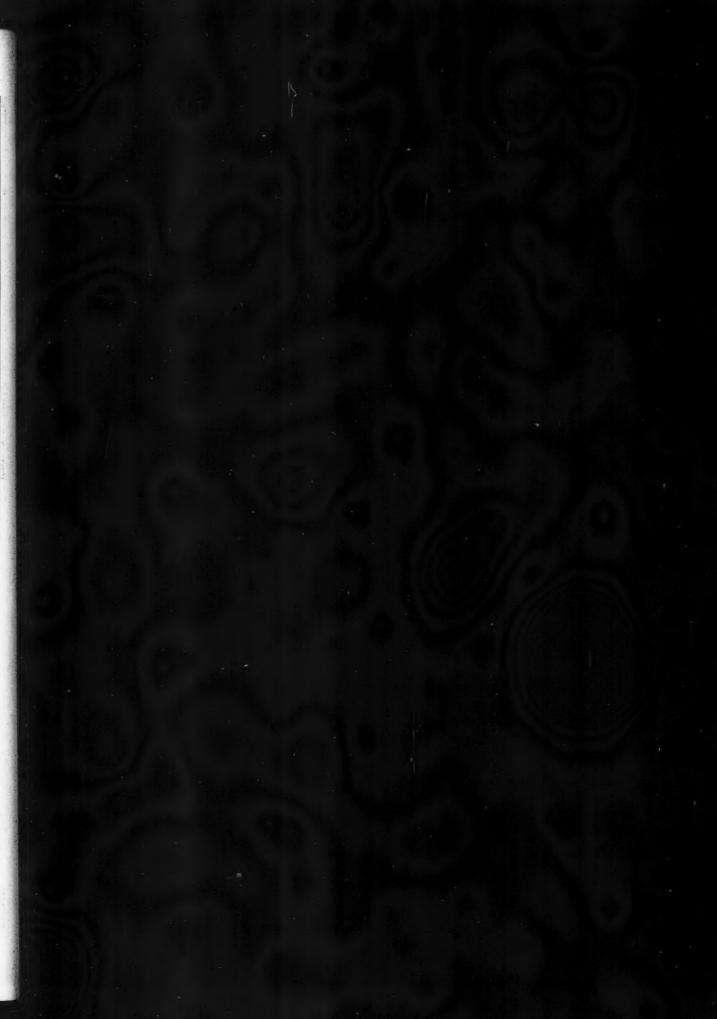
CRIME!

CCORDING to writers of crime stories, criminal detection is largely an art. So it may have been once, but today it is even more a matter of science, and chemistry is the chief branch of pure science on which it draws. The way of the poisoner, for example, is beset with many more perils than it was when the XIXth century public were regaled with the deductive triumphs of the fictitious Sherlock Holmes or shocked by the revelations of the Rugeley trial. Minute traces of the rarest poisons can nowadays be recognised infallibly and estimated accurately. Chemical and biochemical tests enable bloodstains to be readily identified, revealing the species of animal or the particular "blood-group" of human being from which the blood came, and thus narrowing down and simplifying the work of the detectives. The chemist is often able to add precision to evidence which may in itself be

vague. For example, the presence of phosphorus in the sulphuric acid vat of a munitions works may lead to surmise as to the fate of a missing worker; but if chemical tests prove that the phosphorus content of the vat is within the normal limits of phosphorus content of the human body, surmise may approach certainty. The research chemist, aided by the resources of the chemical industry, has also devised means of reading the writing on charred letters and documents; of unmasking forgeries in manuscripts and reputed "old masters"; of detecting adulterants in food and drink; and of analysing the most complex nostrums which are still bought by the more gullible. The role of the chemist is protective as well as constructive, and the public should appreciate the part that chemistry plays in helping the incomparable

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the guiltless and bring the guilty to justice.







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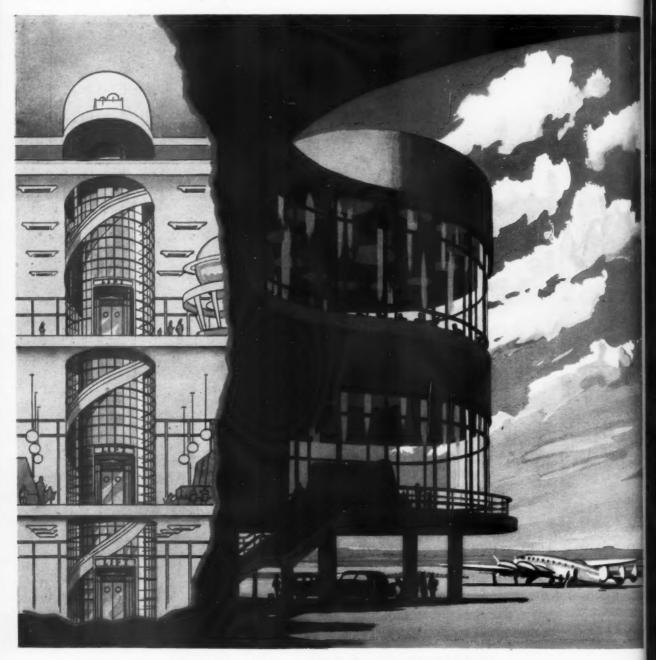
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In common with every other periodical this JOURNAL is rationed to a small part of its prewar needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the JOURNAL. Newsagents now cannot supply the JOURNAL except to a "firm order." Subscription rates: by post in the



order." Subscription rates: by post in the U.K. or abroad, £1 15s. od. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra. Goods advertised in the Journal and made of raw material now in short supply, are not necessarily available for export.

DIARY FOR MAY JUNE AND JULY

Titles of exhibitions, lectures and papers are printed in italics. In the case of papers and lectures the authors' names come first. Sponsors are represented by the initials as given in the glossary of abbreviations on the front cover.

B IRMINGHAM. British Industries Fair, 1947. Engineering and Hardware Section. At Castle Bromwich. (Sponsor, Exhibitions Branch, Export Promotion Department, Board of Trade, in collaboration with Birmingham Chamber of Commerce.)

UNTIL MAY 16

BRIDGWATER. Leslie Hurry. Designs for Theatre and Ballet. At the Arts Centre. (Sponsor, the Arts Council.)

UNTIL MAY 26

D UBLIN. British Architects' Conference. (Sponsor, RIBA.) June 11-14

DUNDEE. J. Hacking. The Generation and Wholesale Distribution of Electricity. At the Training College Hall, Park Place, Dundee. (Sponsor, IEE, Scottish Centre.)

LONDON. Steel Door Frames. Exhibition at Henry Hope and Sons, Ltd., 17, Berners Street, W.1. The object of the exhibition is to overcome any practical difficulties that architects may foresee or experience in fitting steel door frames to the various types of walls and floors in use to-day. (Sponsor, Henry Hope and Sons, Ltd.)

British Industries Fair, 1947 (Lighter Industries.) At Earls Court. (Sponsor, Exhibitions Branch, Export Promotion Department, Board of Trade, in collaboration with the Birmingham Chamber of Commerce.)

UNTIL MAY 16

Thirteen Nations Plan for Better Living. At the Institution of Civil Engineers, Great George Street, S.W.1. The material on show was originally collected for an exhibition held in conjunction with the 1946 Congress of the International Federation for Housing and Town Planning at Hastings, and, as now reconstituted, includes material from Australia, Belgium, Denmark, France, Great Britain, Greece, Netherlands, New Zealand, Norway, Poland, Sweden, Switzerland, United States of America. (Sponsors, Town and Country Planning Association, Institution of Civil Engineers, Town Planning Institute, and Institution of Municipal Engineers.)

J. H. Forshaw. Housing and Town Planning. Two lectures at University College, Gower Street, W.C.1. (Sponsor, U.C.) 5 p.m. May 15

Engineering and Metalcraft Exhibition. At the Horticultural Hall, Westminster, S.W. (Sponsor, British Bulletin of Commerce (Exhibition Department.) UNIL MAY 23 Max Lock. Planning Teamwork in Action at the Hartlepools. At the Planning Centre, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 12.45 p.m., buffet lunch. 1.15 p.m., talk and discussion. May 15

Dr. L. Dudley Stamp, Chief Adviser on Rural Land Utilization to the Ministry of Agriculture. Planning for Agriculture, Forestry and Rural Amenities. At the Planning Centre, 28, King Street, Covent Garden, W.C.2. Fourth of a series of seven lectures on Planning. Charge for individual lectures, 2s.; students, 1s. (Sponsor, TCPA.) 6 p.m.

Sir Kenneth Clark. International Gothic and Italian Renaissance. At the Royal Society of Arts, 6-8, John Adam Street, W.C.2. (Sponsor, RSA.) 5 p.m. May 21 Institution of Structural Engineers. Annual General Meeting at 11, Upper Belgrave Street, London, S.W.1. (Sponsor, ISE.) 6 p.m.

R. Fitzmaurice, Deputy Chief Scientific Adviser, Ministry of Works. Recent Research in Housing. At the Housing Centre, 13, Suffolk Street, S.W.I. 12.45 p.m. Buffet lunch, 2s. 6d., 1.15 p.m. Talk and discussion. (Sponsor, HC.) May 27

Announcement of Result of AA Election

Announcement of Result of AA Election of Officers and Council for Session 1947-8. At the AA, 34-36, Bedford Square, W.C.1. (Sponsor, AA.) 6 p.m. May 28

R. L. Reiss, Vice-Chairman of Executive, Town and Country Planning Association. A Master Plan for England and Wales. Last of a series of seven lectures on Planning. At the Planning Centre, 28, King Street, Covent Garden, W.C.2. Admission 2s.; students, 1s. (Sponsor, TCPL) 6 p.m.

LUTON. Danish Domestic Design Exdown Park. At the Public Museum, War-(Sponsor, the Arts Council.)

ROTHESAY. P. W. Macfarlane. Planning for Industry. (Sponsor, TPI.)
MAY 16

THE HAGUE. Fuel Economy Conference. Particulars from the British National Committee World Power Conference, 201-2, Grand Buildings, Trafalgar Square, London, W.C.2.

ence, 201-2, Grand Building,
Square, London, W.C.2. Sept. 2-9

T ORQUAY. Town Planning Institute.
Twenty-First Annual County Meeting.
(Sponsor, TPL) May 29-31

WIDNES. Ideas on Design in The Home Exhibition. (Sponsor, the Arts Council.)

UNTIL MAY 31

NEWS

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Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis. The JOURNAL's starring system is designed to give this emphasis, but without prejudice to the unstarred items which are often no less important.

means spare a second for this, it will probably be worth it.

** means important news, for reasons which may or may not be obvious.

Any feature marked with more than two stars is very big building news indeed.

The fifth of the THREE
MONTHS' COMPLETION
COURSES IN TOWN AND
COUNTRY PLANNING ended
on March 29, 1947 sponsored by
the School of Planning and Research
for Regional Development. The
following candidates passed the course
successfully and are accordingly
exempt from the final examination of
the Town Planning Institute.
Distinctions were obtained by:—A. B.
Bunch, A.R.I.B.A., Coventry; W. N. B.
George, B.ARCHLIVERPOOL, A.R.I.B.A.,
Coventry; W. D. Woodall, P.A.S.I., Hunts.
Other successful candidates in order of
passing, were:—G. W. Seddon, B.S.C.,
A.M.I.C.E., Lancs; J. Bolton, M.E.N.G.,
A.M.I.C.E., Lancs; J. Bolton, M.E.N.G.,
A.M.I.C.E., A.R.I.B.A., London; R. A.
Jensen, A.R.I.B.A., London; T. J. Widdaker,
DIP.ARCHLEEDS, A.R.I.B.A., Leeds; R.
Blizzard, P.A.S.I., Southampton; W. J. Scott,
A.R.I.B.A., Wilts; J. Botterill, P.A.S.I.,
A.M.INST.MUN.E., Huntingdon; F. Marston,
A.R.I.B.A., Derby; R. P. Gray, A.R.I.B.A., London; V. Kostka, DIPLING, London and
Czechoslovakia; B. E. Waren, P.A.S.I.,
Surrey; H. Dessau, A.R.I.B.A., Nottingham;
R. Dyet, P.A.S.I., Lancs; C. E. D. Gibson,
A.R.I.B.A., A.A.DIPL., Gloucestershire; G. V.
Rees, Glamorgan; G. P. Pitot, DIPL. ECOLE
DES BEAUX ARTS, Mauritius; J. D. Peake,
P.A.S.I., Herts.

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From AN ARCHITECT'S Commonplace Book

THE CELT AND THE STONE. [From I Bought a Mountain, by Thomas Firbank (Guild Books).] Davies got down on one knee, and the men lowered the slab gently on to his back. We expected to see him flattened slowly into the earth, but he rose steadily to his feet and plodded on at an even pace up the mountain. This was my first experience of the Celt and the Stone. A Celt will impatiently snatch a boulder from the crowbars of a gang of Saxon workmen and trundle it rapidly away. He will lift alone enormous stones to make a coping on a drystone wall. He will slide with a touch great flat slabs to bridge a stream. There is no question of strength. The Celt has an understanding with the stone; they have lived together for so long. The stone is taken off the hard-won fields, and is built into the walls which enclose them. It is chipped away to make room for the foundations of a house, and the pieces fit into the walls. It is quarried, and split to slate the roof, and no quarry yet, however up to date, has found machinery to split slates as well as the Celtic hand. The stone is made into gateposts, stiles, drains, floors, shelves. It is at once the servant and the enemy of the Celt. But from their age-long association they understand each other. Davies will go out to split a slab off a fifty-ton boulder, armed with a pickaxe only. "The grain do run this way," he points out, and after a few gentle taps the rock disintegrates. Or he will wish to use a big rock in the foundations of a wall. "Let me lay hold on the flamer myself," he says. "There do only be one place to catch hold on a rock."

The Department of Scientific and Industrial Research is using the HOUSES OF PARLIAMENT for scientific investigations. Instruments for recording the sulphur dioxide in the air have been set up near the top of the Big Ben Tower and on the Speaker's Green. Sulphur dioxide is one of the causes of decay in building stone, including the magnesium limestone of which the Houses of Parliament are built. Most

of it is produced in the combustion of coal. The main object of the measurements being made is to compare the sulphur dioxide concentration at ground level with that at a considerable height above the ground. The vertical distance between the instruments is 238 feet. The instrument on the Speaker's Green is at the top of the landing steps by Westminster Bridge. The apparatus is contained in a small louvred box on top of a green post five feet high. The other instrument is less noticeable, being on a small platform above Big Ben. The research is

part of the work on Atmospheric Pollution being carried out by the Fuel Research Station, DSIR.

++

Mr. T. S. Tait of Sir John Burnet, Tait and Lorne has been appointed Architect for THE NEW COLON-IAL OFFICE to be erected on the site of the old Westminster Hospital.

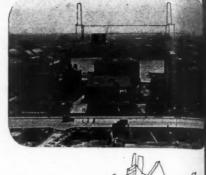


At the Princeton University Bicentennial Conference on Planning Man's Physical Environment. From left to right. Front row:
1. Ralph Walter, New York City. 2. John E. Burchard, Mass. Inst. of Technology. 3. Robert B. O'Connor, Princeton University.
4. J. V. Hudnut, Harvard University. 5. Adelbert Ames, Dartmouth Eye Institute. 6. Richard J. Neutra, Los Angeles. 7. Henry S. Churchill, N.Y.C. 8. Walter Gropius, Harvard University. 9. Arthur C. Holden, N.Y.C. 10. Jose Luis Sert, N.Y.C. 11. Arthur E. Morgan, Yellow Springs, Ohio. 12. Alvar Aalto, Mass. Inst. of Technology. 13. George Howe, Philadelphia. 14. Frank Lleyd Wright, Spring Green, Wis. 15. Sherley W. Morgan, Princeton University. Second row: 16. Liang Ssu-ch'eng, Yale University. 17. Jean Labatut, Princeton University. 18. Francis A. Comstock, Princeton University. 19. Walter Baermann, N.Y.C. 20. A. Lawrence Kocher, College of William and Mary. 21. Howard P. Vermilya, N.Y.C. 22. Fred N. Severud, N.Y.C. 23. Theodore M. Greene, Yale University. 24. Walter A. Taylor, Am. Inst. of Architects. 25. Gyorgy Kepes, Mass. Inst. of Technology. 26. B. Kenneth Johnstone, Carnegie Inst. of Technology. 27. Konrad Wachsmann, N.Y.C. 28. Marcelo Roberto, Rio de Janeiro. 29. Leopold Amaud, Columbia University. 30. Kenneth K. Stowell, N.Y.C. Third row: 31. Henry L. Kamphoefner, University of Oklahoma. 32. G. E. Kidder Smith, N.Y.C. 33. A. Gordon Lorimer, Douglaston, L.I. 34. Ernest J. Kump, San Francisco. 35. Theodore T. McCrosky, Boston. 36. Thomas H. Creighton, N.Y.C. 37. George Grey Wornum, London. 38. William Roger Greeley, Yale University. 39. Serge Chermayeff, Chicago. 40. Talbot F. Hamlin, Columbia University. 41. Sigfried Giedion, Switzerland. 42. A. M. Friend, Jnr., Princeton University. 43. Louis Justement, Washington, D.C. 44. William W. Wurster, Mass. Inst. of Technology. 45. George Fred Keck, Chicago. 46. Roy Childs Jones, University of Minn. 47. Catherine Bauer, Harvard University. 50. Henry A. Jandl, Princeton University. 52. Frederick J. Adams, Mass. Inst. of

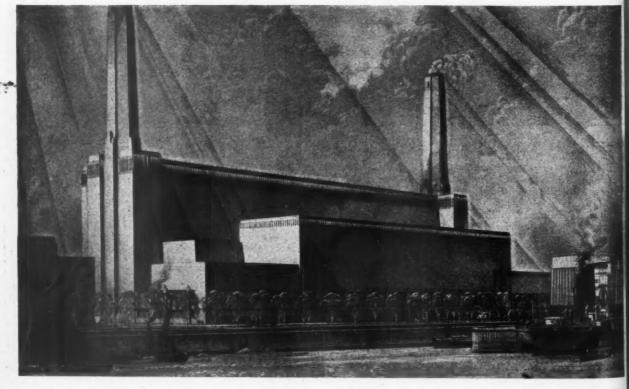
The Bankside Controversy

The controversy over the building of a power station on the South Bank of the Thames continues to rage, but—as our leading article this week points out—over the less important issue of the visual conflict of the station with St. Paul's. The real issues have been missed. These are (i) the veto on long-term planning implied by the decision to build the power station on the new site and as a rider to this (ii) the problem of how Bankside should be treated as part of the London plan as a whole. Bankside, now virtually a desert, has a tremendous history of which a few relics remain sufficient to remind the historian of its ancient character—the human scale of the waterside typified by the sketch below of Windsor Wharf, backed by the large scale industrial buildings behind

which gave Doré the inspiration for his drawings of London. This character should give the planner the key for the future of Bankside. To substitute for this character the vast and sterile vistas of the managerial revolution style is to make the great planning howler. Top, the position of the proposed original coal-fired power station on the South Right, a sketch illustrating the existing scale and character of the site for the station. Bottom, the first design for the station showing the little formal trees which are too often and superficially substituted for true planning insight. Other illustrations of the area appear on page 404.







Mr. I Arthur WON EDR. The Do the Ro that in Cathed Ceylon, awarde Mr. A

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Sir K

Mr. I. Country Town, Plan Housing at the ...

Mr. Roger A. P. Pinckney and Mr. Arthur F. E. Gott of London have WON THE COLOMBO CATHEDRAL COMPETITION. The Dominions and Colonial Committee of the Royal Society of Arts has announced that in the competition for a design for the Cathedral of the Holy Cross at Colombo, Ceylon, the first premium, £500, had been awarded to Mr. Roger A. P. Pinckney and Mr. Arthur F. E. Gott, of Gray's Inn Square, W.C. The competition was judged by Sir Giles Gilbert Scott, who states in his report: I must express my disappointment at the poor average quality of the designs sent in, and, with the exception of No. 9 (the winning design), I am bound to say that I should not be very anxious to see any of them carried out. The second premium, £200, went to Mr. F. X. Velarde, of Liverpool, and the third premium, £100, to Mr. I. B. Wride, of Cardiff.

In the House of Commons the Postmaster-General, announced the abandonment of the scheme for the erection
of a TELEVISION STATION
ON WHITE HORSE HILL,
on the Berkshire Downs.
He said: Since my previous reply I myself
visited White Horse Hill. Having seen the
proposed site for the television station and
the general surroundings, I agree that we
should locate the station elsewhere and I
have given instructions accordingly.

Sir Roy Robinson, Chairman of the Forestry Commission; BRITAIN'S FOREST AREA is to be increased from three to six million acres during the next 50 years. It is hoped that 1,100,000 acres will be planted in the next 10 years, 200,000 by private owners under the Commission's dedication scheme. Sir Roy Robinson, who was speaking in London, said: the Commission hopes to have 5,000,000 acres of productive woodlands, leaving 1,000,000 for amenity purposes. The annual yield would be equal to about 35 per cent. of the national timber requirements. Before the war 96 per cent. was imported.



Mr. Lewis Silkin, Minister of Town and Country Planning, inspecting a model British Town, when he opened Thirteen Nations Plan for Better Living, an International Housing and Town Planning Exhibition at the Institution of Civil Engineers, London. The exhibition closes on May 24.

GAMEKEEPER OR POACHER?

R. SILKIN, speaking at the Walter George dinner, suggested that compared with the supply of electric current, the view of St. Paul's is unimportant, and that Londoners are of that opinion. It is surprising that he should put forward such a view, for three reasons: first, the elected representatives of Londoners have spoken in a directly contrary sense; second, as Minister of Town and Country Planning his task is to see that local authorities do not allow local interests to reduce planning to impotence, and third, that the antithesis put forward is obviously false and absurd. We do not propose to discuss the question of amenity; the protests made in this cause have already resulted in considerable modifications being made to the original design.

For us, the gravity of the Minister's decision lies in its negation of the whole intention of all the planning and replanning proposals that have been produced during the last few years, with, be it said, the support and encouragement of Mr. Silkin himself. The decision to rebuild Bankside generating station, whether one chimney or two, oil or coal fired, ninety or a hundred and thirty feet high is the result of a panic fear for electricity supplies in London. Twelve months apparently have stood between the erection of an alternative to the Bankside station and the abandonment of the intention to develop the south bank of the Thames in an orderly and considered matter.

Mr. Silkin has given the impression that he is not interested in what happens thirty years from now, but there are many citizens of this country who returned to power in the House of Commons the party of which he is a member because they were deeply concerned with what will happen in thirty years time and looked to the Labour Party to protect the long term objectives from the encroachments of opportunist, parochial and panic decisions.

In spite of all denials and evasions the erection of a large power station at Bankside, while contributing a very small proportion of the power requirements of London, will have a decisive effect on the planning of the South Bank. The Abercrombie plan for the area is virtually scrapped, and even if that proposal were merely "an idea in somebody's head" the new power station sticking out like a sore thumb will inevitably determine the zoning and lay-out of the area. Those who have followed the histories of planning schemes in various parts of the country will find many similar cases; we need only refer to the action of the London County Council in building quasi-satellites in the green belt, the difficulties over Stevenage, the fate of Plymouth. In these cases, however, the Minister of Town and Country Planning has been a protagonist of those to whom what happens thirty years hence is important; now the roles are reversed, and Mr. Silkin will rapidly lose the support he has enjoyed among architects and town planners if he appears as the inciter of, and apologist for, unplanning.

It seems to us that the Minister of Planning is concerned in this case neither with integrated planning of public services with zoning, nor with protecting a considered development against the development which the Ministry of Town and Country Planning was expressly invented to oppose.

A further debate on the subject is to take place in both Houses of Parliament and we hope the Minister will have the

courage to reverse the decision.



The Architects' Journal

9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1

Phone: Whitehall 0612

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

RETICENT AD-MEN

Mr. Silkin's remarks on the Power Station have created a minor crisis, if not in the Government, in the section of the public that is represented by the specialists in the Building Trade and its allied professions who work for, and have voted for, the Government. The spectacle of a Minister of Planning intimating that he believes Planning is really all highbrow hooey, has caused them a profound shock.

Though everybody in the country seems to be discussing his remarks, there is hardly any mention of where they were made. They were made at a coming-of-age party given by E. Walter George at which a number of prominent people were present including George Tomlinson, Minister of Education, and Arthur Greenwood, Minister without Portfolio.

The name E. Walter George may not mean very much to members of the public but to the Building Trade it

means a famous firm of advertising agents who have made a speciality of architectural advertising and who look after people like London Brick, Ascot and the Lead Council. We are thus presented with the curious picture of expert advertising agents obtaining the publicity story of the year at their own dinner and refraining from plugging their own scoop. I, for one, find this entertaining and cannot resist complimenting E. Walter George on their rather refreshing reticence.

WDC PAYS UP

The War Damage Commission has so far managed (and congratulations on this are due) to avoid any large amount of litigation over owners' claims in respect of their damaged properties. But there are points of principle, and importance, which can only be settled by a court. One is the liability of the Commission in respect of a property damaged by enemy action which was defective when it was damaged. Is the Commission liable to pay the full cost of providing the owner with a new and sound structure or is it responsible only for a proportion of the cost of rebuilding?

Last month the Court of Appeal gave a decision on this point-or rather, so my legal friends tell me, avoided giving a decision on this point. In the case before them some houses, defective at the time, had been so damaged by blast that the front walls required rebuilding. The Commission put its liability at one-third of the total cost. owners pressed for the full amount. The Court of Appeal, skirting the point of principle, held that on the facts of this particular case, there was no evidence before the court that the walls, when the bomb arrived, were unsound in the sense that they would have fallen

down of their own accord within any measurable period of time.

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Result, the Commission was held liable for the full cost of rebuilding—in this case. The Court left open altogether the question whether on another set of facts apportionment of the cost might not be the proper solution. Heigh ho. At least the lawyers will be breathing again.

CONVERSION

Mr. Yerbury has edited a book on house conversion which has just been published by Ascot. There is plenty of technical information in it, and a dozen or more examples of conversion schemes by various architects, with before and after plans and other information. The book ends up with full technical data on all the Ascot heaters, for the object of the whole thing is admittedly to persuade you to use these, heaters on your own jobs.

But it is an enlightened piece of publicity which far more firms might well adopt, for we all prefer to feel we have been logically persuaded rather than battered by high pressure slugging. I have only one complaint which could easily be remedied in future editions: Plans printed in white on a pale yellow aren't too easy to read even though they may look pretty.

Incidentally, the book is available free to all *bona fide* architects and to local authorities.

QUESTION OF COPYRIGHT

The Law Times recently had an article of considerable interest to architects, on the legal position of the copyright in architects' drawings. As the article points out, in the majority of cases where a war-damaged structure is repaired the work is done from the original plans of the building drawn up on its initial construction. In many cases, for various reasons, some of them inevitable, the original architect is not employed on the rebuilding. I the use of the original plans an infringement, by owner, builder, or fresh architect, of the copyright in the original plans?

It would be nice to be able to report that the learned author of the article

in our contemporary was able to give a series of unequivocal answers to this important question. Alas! like so many lawyers, he is compelled to say "that depends." Some definite answers do emerge. It is apparently reasonably clear that the copyright in plans remains vested in the architect who prepares them, not in the client who commissions the work. But it is not clear whether the normal contract under which an architect works gives the man who commissions him the right to use those plans for rebuilding the structure on the same lines if at any time that becomes necessary. All the article says is that "it would not be unreasonable for a court to arrive at such an implication."

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Assuming that it did, that would cover both the architect and the builder who worked on the instructions of the owner, but, assuming it did not, it would leave both owner, architect and builder liable to an action for damages for infringement of copyright at the suit of the original architect and no agreement by the owner to indemnify either builder or architect would have any legal effect.

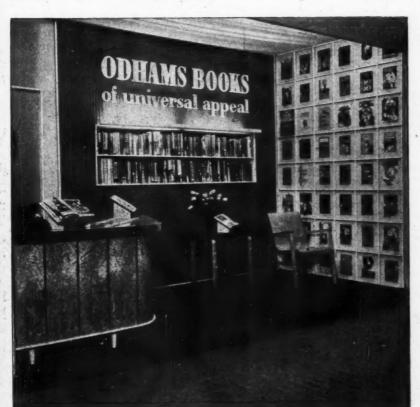
Probably the chances of any such unfriendly action by the original architect are remote, but the net result seems to be that architects engaged on war-damage work have in fact another contingent burden added to their shoulders (as if they hadn't enough already).

The article ends with a suggestion that the position should be remedied by legislation, but its concluding sentence, "it must be admitted that the prospect of an already overburdened legislature finding parliamentary time for such a measure in the near future seems, unfortunately, slight indeed," puts the position in a nutshell with an admirable touch of understatement.

RELAY THE RELAY

The controversy, started by John Betjeman, over the proposed wireless station on White Horse Hill, Berkshire, has come to an end. Since I wrote my note last week the Postmaster General has paid a visit to White Horse Hill and, as you have probably read, has decided to abandon the scheme. Thankyou, Mr. Betjeman.

ASTRAGAL



Odham's stand at the book section of the British Industries Fair at Olympia, designed by Katz and Vaughan. Other stands are illustrated on pages 410-413.



LETTERS

Rolf Hellberg, F.R.I.B.A.

Millicent P. Bouverie,

(Chairman, Housing Sectional Committee Nat. Council of Women of Gt. Britain)

E. V. Penn,

(General Secretary, ABT.)

Coventry Cathedral

SIR.—In your issue of May 1, you reported a public meeting in Coventry organised by Sir Alfred Herbert for the purpose of sup-porting the rebuilding of the Coventry Cathedral in its original form, and stated that a resolution to that effect was passed by the meeting. I wish to point out that members of the Coventry Society of Architects and of the local branch of the ABT have over the last few months conducted a vigorous press campaign in favour of building a contemporary Cathedral alongside the old

contemporary Cathedral alongside the old spire, and that this campaign has achieved a very large measure of success.

We challenged Sir Alfred Herbert to a public debate and, this offer being refused, we attended the meeting referred to and secured strong support, with the result that the resolution was only passed by a majority. Both the National and local press were Both the National and local press were present and both they and the BBC gave credit to our opposition, and it is regrettable

credit to our opposition, and it is regrettable that the ArcHTECTS' JOURNAL should have been ignorant of these facts.

The Coventry Society of Architects also held a special general meeting to determine the feelings of their members on this subject, and the following resolutions were passed, the first three unanipously: the first three unanimously:—

1. The Cathedral should be sited on or

adjacent to its position before destruction in 1940.
2. Any new buildings should be contem-

porary in character.

3. The designer should be chosen in open competition assessed by a jury and that such competition should be held in two stages.

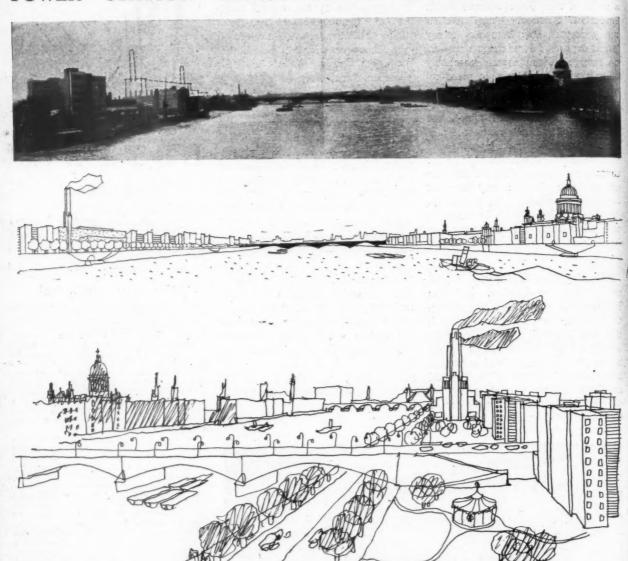
4. It is desirable that construction should first commence with the ancillary build-

ings required for Christian teaching, unity and service. ROLF HELLBERG Coventry

Plastic W.C. Seats

SIR,-It has come to the notice of this Committee that plastic w.c. seats with recessed undersides are being fitted in some of the new houses. As these seats do not conform with the British Standard Specification 1254, and from the hygienic point of view are undesirable, this Committee would appreciate your co-operation in their efforts to advice architects and builders how anxious they are that only seats with flat undersides and open front be fitted. (The B.S.S., while specifying that the undersides shall be flat and not recessed, allows the fronts to be either closed or open, but we would strongly recommend the open front design.)

POWER STATION RAISES REAL PLANNING PRINCIPLE



The real principle which has been missed in the St. Paul's and the Power Station controversy is that, if the proposal to build a station opposite the Cathedral goes through, the whole aim of physical planning will receive an official denial and the existence of a Ministry of Town and Country Planning will become a farcical paradox. Once the idea of planning has been accepted, one of its objects should be to arrange for power stations on a comprehensive long-term basis. If these are built anywhere in the short-term, ad hoc manner of laisser-faire, planning ceases. In which case, let the Minister of Town and Country Planning face up to this incluctable position and resign. The drawings above show how the station interrupts the Abercrombie plan. We do not plead particularly for the Abercrombie solution of the South Bank problem since it appears to destroy its traditional character. But it is at least a plan. We have reached the Manchuria Question in planning history and it remains to be seen whether the role of Neville Chamberlain is to be played by Mr. Silkin. Top, a photograph of the river showing the position of the original coal-fired station; to mitigate the visual conflict with St. Paul's a less obtrusive oil-fired station is proposed, a solution which is irrelevant to the real principle involved. Centre, a sketch showing the river with the smaller oil-fired station. Below, a sketch showing how the South Bank would lose its traditional character if the station were built.

The Committee appreciates the shortage of supplies of equipment, but would like to feel that your readers would, in future, specify for all seats with flat undersides and open front.

MILLICENT P. BOUVERIE,

Chairman, Housing Sectional Committee, National Council of Women of Great Britain.

Salary Scales and Registration

SIR,—Mr. John Smith raises an important issue concerning the registration of architectural assistants. The Association of Building Technicians recognises the weakness in the Registration Act and its failure to provide for appeals by assistants on the same basis as by practising architects. But the ABT does not advocate, nor are we sure

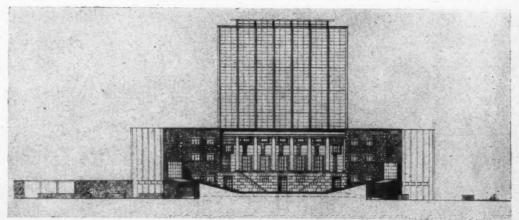
would Mr. Smith, any lowering of standards which would be detrimental to the profession.

The ABT has issued and negotiates for salary scales for architects. Full information would be given to Mr. Smith if he will write to the General Secretary, 5, Ashley Place, S.W.1.

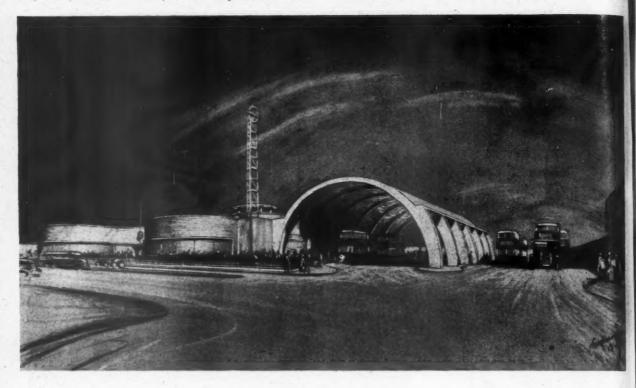
ondon General Secretary, ABT.



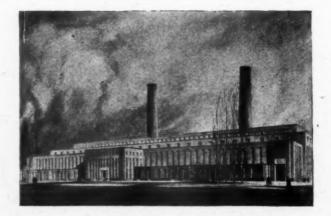
ROYAL ACADEMY EXHIBITION

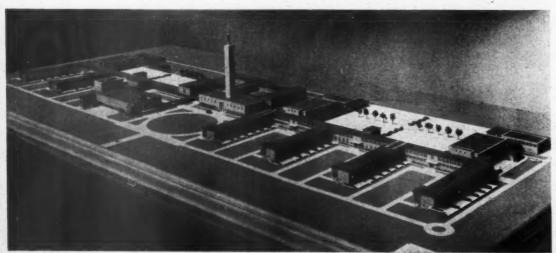


Top, Drama Theatre, Oxford: model of a project for Oxford University; designed by Frederick Gibberd. Below, north-east elevation of the Theatre with section across the open-air theatre.



Above, Newbury Park Underground and Bus Station for the London Passenger Transport Board; designed by Oliver Hill and drawn by J. D. M. Harvey. Right, Brunswick Wharf Power Station, Poplar; designed by F. Q. Farmer and F. Dark. Below, model of proposed group of three Secondary Schools and Community Centre, Wallend, East Ham; designed in the East Ham County Borough Architect's Department by F. C. Ball, Borough Engineer, and J. W. Taylor, Architect to the Borough Engineer.

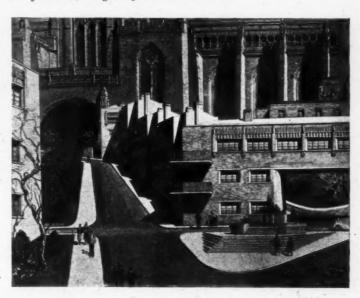


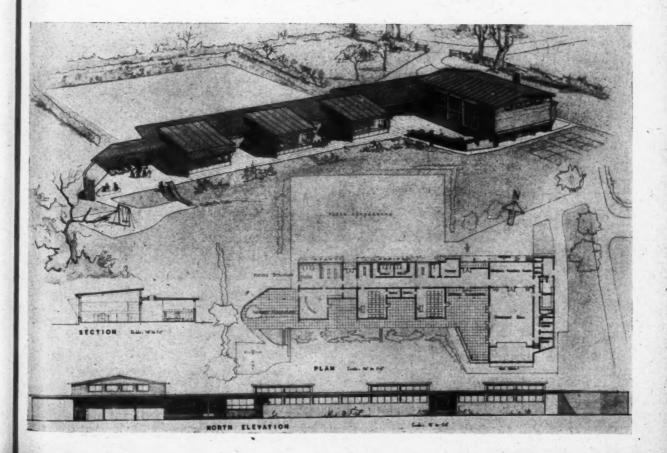




R.A. EXHIBITION

Left top, proposed NAAFI Club, Aldershot; designed by Ernest M. Joseph and drawn by E. Douglas Lyons. Left below, offices and works at Wembley; designed by Brian O'Rorke and drawn by Frank A. Weemys. Below, Liverpool Cathedral: view of south side, showing layout suggested for adjoining area; designed by Sir Giles Gilbert Scott and drawn by A. C. Webb. Bottom, new village school at Studham, Bedfordshire; designed by Peter B. Dunham.

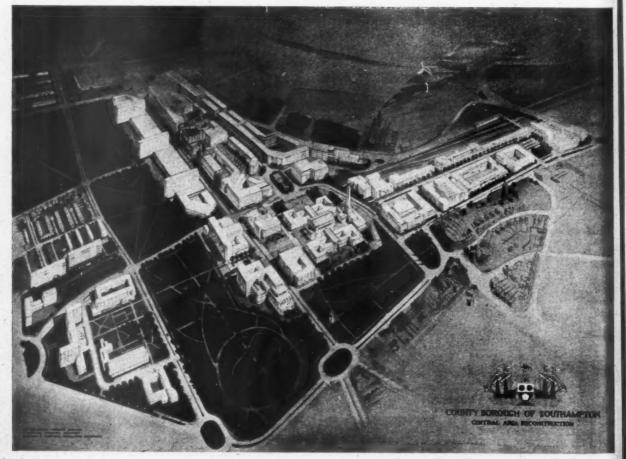




R.A. EXHIBITION



Top, the green in the Orchard Road Housing Scheme for the Royston Urban District Council; designed by Mauger and May, and drawn by John Mitchell. Right, permanent housing for the Borough of Camberwell; designed by John Grey and Partners, and drawn by D. F. Martin-Smith. Below, proposed reconstruction of the Central Area of Southampton; designed by F. L. Wooldridge, Borough Engineer, D. Winston, Borough Architect, and Johnson and Crabtree, Consulting Architects.



Speech before report dealt which Gove ment To conce initia tions cover comn sumn

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Speeches and lectures delivered before well societies as reports of their activities, are dealt with under this which includes trade associations, Government departments, Parliament and professional societies. To economize space the bodies concerned are represented by their initials, but a glossary of abbreviations will be found on the front Except where inverted commas are used, the reports are summaries, and not verbatim.

TCPA

Conference

April 10 and 11. Two papers at the Town and Country Planning Association's Conference at Conway Hall, London, on the application of the ABERCROMBIE LONDON PLANS AND THE CLEMENT DAVIES REPORT. One, Save the Green Belt, by C. Harper, Borough Engineer, Barking; F. Lee, Engineer, Enfield Urban District Council, and F. J. Osborn, Town and Country Planning Association. Two, Movements of People and Industry, by B. J. Collins, Planning Officer, Mid-West Herts Joint Planning Committee; T. E. North, Borough Architect, West Ham and Rees J. Williams, Borough Engineer, Tottenham.

SAVE THE GREEN BELT

The principles we wish to emphasise are these: (a) Preserving the Green Belt ring round built-up London. (b) Reducing internal density on re-development, and reducing the concentration of business and industry in built-up London. (c) Dispersing the "overspill" of people, business and industry to self-contained towns of limited size beyond the Green Belt ring.

Recognizing the urgency of the housing need, we are bound to point out how disastrous it is to the Greater London Plan that the powerful influence of the LCC is directed towards the creation of vast new directed towards the creation of vast new

Recognizing the urgency of the housing need, we are bound to point out how disastrous it is to the Greater London Plan that the powerful influence of the LCC is directed towards the creation of vast new suburban housing estates within the Green Belt. LCC housing has conquered the Green Belt at Oxhey and although falling at Chessington, actively threatens it with sepemes of 20/30,000 people each at Boreham Wood, Farnham Royal and other places.

If only the LCC would actively co-operate in the development of the New Towns and the extension of existing small towns in the

outer ring by acquiring estates and building houses there, and actively encourage a proportion of industries to move there, then we believe they would solve their housing problems far more satisfactorily and equally fast as compared with their present policy. They would decrease rather than increase transport difficulties and would obviate all the local conflicts which they are now creating in the neighbourhood of the areas they are proposing to develop.

It is the Londoners themselves who will

It is the Londoners themselves who will gain most by the right form and quantity of decentralisation. Only by full implementation of the Greater London Plan can Londoners be rescued from the dreadful choice between multi-storey flats and hours of strap-hanging. Can their enthusiasm be held if the LCC seems complacent about all this and seems to treat the New Towns policy with aloofness? At present, to all appearances, the LCC is pursuing its interwar housing policy with no intention of making a clean break from it.

appearances, the LCC is pursuing its interwar housing policy with no intention of making a clean break from it.

We must also face the fact that the present tendency for planning authorities in the London Region to fight each other on matters of major development policy is a danger to autonomy in local planning.

That the wider issues of planning the present the p

That the wider issues of planning, the preparation of broad development plans, must be handled regionally, no sensible person would dispute. If the City is an absurd unit in relation to the LCC area, the LCC area is an absurd unit in relation to the built-up Metropolis cannot be planned independently of its surrounding Green Belt ring and dispersal area. It looks as if there will have to be a Joint Board for Greater London in any case. But the extent of the functions to be transferred to that Joint Board will surely depend on the evidence the local planning authorities give of the capacity to think in unison regionally.

Assuming that capacity, and assuming the strength to employ adequate planning personnel, the more locally the detailed planning functions can be exercised the better for democracy, and the more adaptable to local conditions our planning will be. Just what the division of functions between the county authorities and Joint Boards, and the non-county boroughs and districts will be is entirely in the melting pot at present. We express strongly the opinion that the more powers can be delegated to the smaller authorities, the better we should be pleased. But in order to establish a sound claim to maximum delegation, the smaller authorities have to prove that they are enlightened, capable and more region-minded than many of them have been up to now. They have to rise above the automatic attitude of grabing and retaining as much population and rateable value, as much industry and as many regional institutions as they can. They have to show that they see the other fellow's interests as well as they see their own. If they all accepted the principles of planning policy we have stated, in the spirit as well as formally, the prospects of local planning autonomy would be far brighter. No Minister would have public support in withholding from the smaller authorities powers they were exercising with competence and imagination.

MOVEMENTS OF PEOPLE AND INDUSTRY

The destination of the population and industry to be re-located should be in accordance with the following principles:

(a) The Green Belt ring must in no circumstances be regarded as a re-location area. We regard the numbers to be re-located in this ring under the Abercrombie Plan as too high and in any case are opposed to the larger number suggested by the Clement Davies Report.

(b) The Greater London outer country ring is the proper destination for the numbers assigned to it under the Abercromble Plan. The principle of founding new towns is wel-

comed, and efforts should be made to increase the number within this ring to eight. (c) There should be more dispersal to destinations outside the area of the Greater London Plan altogether. Many country towns over 35 miles from London are suitable for expansion and there is plenty of evidence to show that many of them desire this. Moreover good sites for the founding of new towns could without difficulty be found between the 35 and 60 miles radius. We believe it would be quite practicable to disperse more than the 260,000 people proposed under the Abercrombie Plan to this area.

area.

When and how? These two questions can best be considered together. The present position of the LCC and of the inner ring towns is, so far as housing is concerned, desperate. Only a limited number of people can, within a reasonable space of time, be re-housed in those areas at sites which have been blitzed or otherwise are available. Moreover, a number of the blitzed sites are already covered with temporary buildings. Thus, the provision of housing on a large scale outside the inner ring is an urgent necessity. The immediate position is complicated by the fact that practically every local authority, both in the Green Belt and outer rings, and outside the area altogether, has an acute shortage of its own.

has an acute shortage of its own.

It has been pointed out, however, that there were, at any rate in May, 1946, a substantial number of people from the London County and the inner rifig living in these outer areas, though there was a tendency to move back again, but many of these people are known to have made applications for houses in the locality where they are now living, and therefore, form part of the local demand. In so far as this is satisfied it will be helping the London problem.

Moreover, there are a large number of people whose home is in the inner ring but

Moreover, there are a large number of people whose home is in the inner ring but whose regular work lies outside (e.g., at Welwyn Garden City and at de Havilland and Jack Oldings at Hatfield). Many of these have applied for houses in the area where their work is. The satisfying of this demand will also assist in the London problem.

It is obvious, therefore, that the most immediate step is the rapid building of houses in the re-location areas. The ordinary system of points qualification for houses should be modified, e.g., those who are living in London and whose work is outside should enjoy priority. In any case it will take time to re-locate many of the industries in central London. As between the new towns and expanding existing towns in the outer areas, it appears to us that an earlier start can be made in the latter than the former.

Following on this, and to some extent overlapping it, is the rapid building of houses definitely for those who are at present living and working in London and the inner ring, but whose wish is to move and whose factories are likely to move. Here there must be the closest synchronisation between the movement of population and of industry. There must be the maximum allocation of

There must be the maximum allocation of houses and therefore of materials and labour, to the outer ring and further afield. In this connection, it is worth pointing out that both the cost, the time and the labour involved in erecting multi-storey flats on central sites, is far greater and the time limit is longer than in building self-contained houses and two-storey flats. As the former would predominate—to start with at any rate—in the inner ring, whilst the latter would greatly predominate in the re-location areas, it is obvious that during the next three years far more dwellings could be erected with the same labour in the re-location areas than in the inner ring. Of course, the construction of dwellings must proceed also on available sites in the County, of London and in the inner ring. But in so far as these latter are two-storeyed, construction will be quicker. We appreciate that the movement of building labour presents difficulties, but this question is a matter for a subsequent session.



Left, the Royal Coat of Arms in paper sculpture above the main entrance at Olympia. Below, the Imperial Chemical Industries stand designed by Basil Spence.

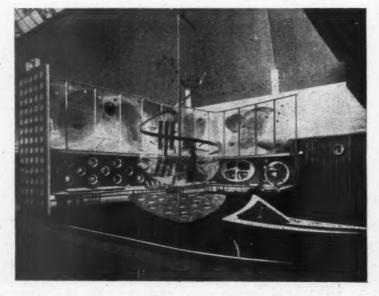
STANDS AT THE BIF EXHIBITION

For the first time in the history of the British Industries Fair, this year the biggest so far held, an attempt has been made, in spite of the fuel crisis and general

shortages of materials and labour, to design the exhibition halls at Olympia and Earls Court as coherent units. Thus the exhibition has been brought into line with the best Continental practice, and a good precedent has been set for future exhibitions.

Early this year, Sir Stafford Cripps, President of the Board of Trade, appointed two panels of consultant architects. For Earls Court, Joseph Emberton, Maxwell Fry and Christopher Nicholson and for Olympia, Basil Spence, R. Y. Gooden and F. R. S. Yorke. Planning has been improved and tubular steel roofed with strips of coloured scrim help to unify many of the smaller individual stands and provide a standard framework.

A number of the individual stands are relatively of a high standard. These have been designed by the consultant architects and by other qualified architects and industrial designers. Most of them are illustrated here including the largest individual stands, those of the I.C.I. and the Potters' Federation, designed respectively by Basil Spence (the chief architect for the Britain Can Make It Exhibition) and by R. Y. Gooden.





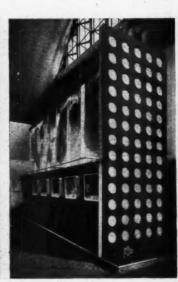
Above, the stand for the British Pottery Manufacturers' Federation, designed by R. Y. Gooden; the mural is by Laurence Scarfe. Below left, the side of the British Pottery stand; centre, the Distillers' Company stand, by Edwin Gallaghan; right, the side of the ICI stand, by Basil Spence.

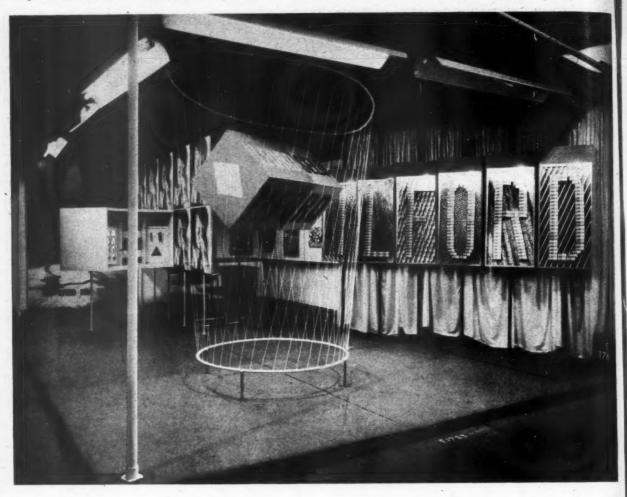


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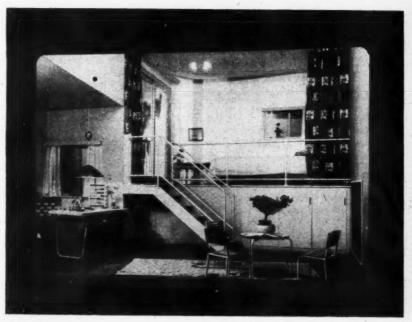




Top, Ilford's stand, by Milner Gray and Robert Gutman of the Design Research Unit. Left, the central feature of the Leather Section at Earl's Court, by Hulme Chadwick, who was responsible for the whole of the leather section.

Right, two interiors, furnished by Dunn's of Bromley, at Earl's Court; top, design by Neville Condor; below, by Jane Drew and Maxwell Fry. Bottom, an entirely prefabricated job for Werner and Edgar, Ltd., which took only 35 minutes to erect at Earl's Court, by G. M. Kallmann.







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STANDS AT THE BIF EXHIBITION

TECHNICAL SECTION

The function of this feature is to supply a digest of, and commentary on, current information of interest to architects as recorded in technical publications and statements of every kind throughout the world. Items are prepared by specialists of the highest authority who are not on the permanent staff of the Journal, and views expressed are disinterested and objective. Items are printed on one side of the paper only to permit of cutting out and pasting up in classified order in readers' files. The Editors welcome information on all developments from any source.

INFORMATION CENTRE

To enable items to be filed all information is classified under the following headings:

1 SOCIOLOGY, 2 PLANNING: General. 3 PLANNING: Regional and National. 4 PLANNING: Urban and Rural. 5 PLANNING: Public Utilities. 6 PLANNING: Social and Recreational. 7 PRACTICE. 8 SURVEYING, SPECIFICATION. 9 DESIGN: General. 10 DESIGN: General. 12 MATERIALS: Metal. 13 MATERIALS: General. 12 MATERIALS: Metal. 13 MATERIALS: Timber. 14 MATERIALS: Concrete. 15 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: Miscellaneous. 17 CONSTRUCTION: General. 18 CONSTRUCTION: Theory. 19 CONSTRUCTION: Details. Complete Structures. 21 CONSTRUCTION: Miscellaneous. 20 CONSTRUCTION: Miscellaneous. 21 CONSTRUCTION: 24 HEATING, VENTILATION. 26 SERVICES, EQUIPMENT: Miscellaneous. 27 FURNITURE, FITTINGS. 28 MISCELLANEOUS.

2.10 planning:general PLANNING AGENCIES ABROAD

The Developing Region, 1946: Seventeenth Annual Report: Regional Plan Association, Inc. (The Association, New York, USA, 1947, no price.)

Report of private American planning association for promoting region-wide development in New Jersey, New York and Connecticut region. Compilation of facts and non-partisan surveys to assist informed public opinion in shaping regional developments. Aim of association to organize and foster local planning developments. Description of recent association publications covering community planning, housing, and regional airports.

3.4 planning: regional and national REGIONAL PLANNING IN ITALY

Presentazione del Piano Piemontese (Plan for the Regional Development of Piedmont, Italy). Astengo, Bianco, Renacco and Rizotti. (Metron, Italy, No. 14, 1947, pp. 2-76.)

Detailed and fully illustrated description of outline regional plan for Piedmont prepared by four Italian architects, and based on extensive regional survey undertaken by them. Survey aspects examined and discussed include land use from point of view of geography, hydrography and climatology; population distribution, growth, tendencies and composition; agricultural land use; location of industry and distribution of commercial facilities; housing and ancillary social services; water supply, sewage disposal and sanitation; transport facilities by road, rail. air and water; and electric power provision

and consumption. Results of survey and principles of procedure laid down by authors adopted by Municipality of Turin to form basic framework for Turin District Plan. Survey maps, charts and statistics easy to comprehend and clearly presented. Text in Italian with short summary in English.

7.5 practice -

BUILDERS' BUSINESS ORGANISATION

Business Methods and Organisation for House Builders and Contractors. A. W. Hopkins and E. C. Clarkson. (Ken-Pax Publishing Co., Ltd., London, 1947, 10s. 6d.) Reference book written mainly for average master builder conducting his own business. General outline information, simply stated, on following aspects: finances; contract estimating; office organisation and layout; contract costing; materials and stores control; building industry taxation with notes on PAYE; and finally present situation in regard to supply and control of building labour. Does not attempt to be complete reference guide being confined only to practical considerations of everyday problems.

9.1 design: general HOUSING DATA

Housing Demand and Supply. H. Ashworth. (Francy & Co., Ltd., 1946, 3s. 0d.)

Booklet written primarily for members of Building Societies Institute and its students. Providing some very useful information on following aspects: trend of population in Great Britain; increase in number of separate families; internal movements of populalation; rate of house-building 1901-13, and 1919-39 including cost of total volume of building, strength of labour force and number and size of building firms; estimate of present total housing shortage and shortage over next fifteen years; control of building and licensing system; costs and subsidies; estimate of total replacement needs.

Temporary houses, new methods of construction for permanent houses; building materials and adaptation, conversion and sharing are other aspects dealt with. Informative survey of housing legislation from September, 1939, to June, 1946, contained in appendix covering (1) rent control, (2) housing subsidies, (3) building materials and housing fund, (4) extension of Small Dwellings Acquisition Acts, 1899-1923, (5) control of selling prices and rents of new houses, (6) restriction on conversion of houses, (6) restriction on conversion of

housing accommodation to non-residential purposes, and (7) provisions to facilitate lettings of parts of dwellings.

Clear and concise general background study to question of housing demand and supply, of advantage not only to members of building societies, but also to architects and

10.7 design: building types HOUSING IN USA

Public Housing Design: A Review of Experience in Low-Rent Housing. National Housing Agency: Federal Public Housing Authority. (US Government Printing Office, Washington, D.C., 1946, \$1.25.)

Most informative and important review of American housing experience during ten years of public administration. Honest attempt to present not only successful achievements but failures and their causes as well. Fully illustrated and indexed.

The following is an annotated summary

of aspects covered:

Site Selection. Relation of site to longrange plans, zoning laws and to transportation and other services. Costs, area and shape of site. Topographical considerations. Checklist as an aid to site selection to assure

consideration of all important factors.

The Site Plan: Definition of site planning and guide to preliminary procedure. Layout design. Arrangement and spacing of buildings. Examples of miscellaneous plans. Relation of buildings and streets to graphy. Location and arrangement of community buildings. Street system and circulation. Parking areas. Waste removal. Fuel delivery and storage. Fencing. Street lighting and street furniture. Allocation of outdoor areas for various selected functions such as community and allotment gardens,

laundry drying yards and types of recreation areas for children and adults.

The Dwelling Type: Project Density: Relationship between land cost, dwelling type and density. Conformance of dwelling types of neighbourhood pattern. Relation of dwelling types to rents. Tenant characteristics and needs. Dwelling types and their relation to physical nature of site, to heating systems and to building and zon-

ing regulations.

The Dwelling Plan: Advantages and disadvantages of semi-detached houses, terrace houses and flats. The various rooms, their functions and their equipment.

Community Buildings and other Service Structures: Types of facilities and prelimi-nary planning considerations. Design of community centres, child service centres and central laundries.

Site Engineering: Drainage. Construction of pavements and other surfaced areas. Miscellaneous site improvements such as fences, clothesline supports, and children's spray pools. Water supply and distribution.
Gas distribution. Sewerage.

The Structure: Its Design and Materials: Foundations. Walls, Floors. Roofs. Sound insulation. Thermal insulation. Miscellaneous details such as windows, doors, weather stripping, etc. Surface finishes.

Selection of Utilities: Analysis of services available. Negotiations as to rates and conditions of contract.

Mechanical and Electrical Design: Plumbing systems including an interesting section on solar heating of domestic hot water. Heating systems including detailed descriptions of district heating plants. Light and

Lawns and Planting: Design. Adequa protection. Maintenance. Existing trees. Adequate

13.7 materials: timber SEASONING

Chemical Seasoning of Timber. (Timber Development Association).

Industrial Design

COMPETITION

De La Rue

OFFER 200 GUINEAS

IN PRIZES FOR AN EXHIBITION STAND

(Closing date, July 30, 1947)

A COMPETITION organised by Art and Industry and sponsored by De La Rue Gas Development, Ltd., offers a first prize of 100 guineas, second prize of 50 guineas, and third prize of 25 guineas, for the best design submitted for an exhibition stand for the display of De La Rue gas appliances. There will be a further special prize of 25 guineas to the author of any design actually used.

THE JUDGES of entries submitted will be A. L. B. LEIGH ASHTON, Esq., S.S.A., Director, Victoria and Albert Museum; L. H. HARDERN, Esq., Public Relations Officer, Gas Light and Coke Co; G. GREY WORNUM, Esq., F.R.I.B.A.

SPECIFICATION

COMPETITORS are offered the opportunity to design an exhibition stand to show De La Rue Multi-Point Gas Water Heaters De La Rue Neat Gas Cookers, De La Rue Gas Refrigerators and Potterton Gas-Fired Boilers (for domestic central heating and storage hot water supply) of various types to the best advantage.

SIZE AND SITE. The stand is to be 20 ft. by 20 ft. with 20 ft. headroom erected on an island site. Electricity, gas, water (and waste) are available.

EXHIBITS. The purpose of the stand is to demonstrate the actual working, attractive appearance, and high quality of the following appliances :-

- * De La Rue Instantaneous Multi-Point Gas Water Heater (Type DLR.175).

 * De La Rue Neat Gas Cooker. * De La Rue Silent Gas Refrigerator.

 * Gas-Fired Boiler (Potterton Rex No. I type) for central heating.
 Gas-Fired Boiler (Potterton Emperor type) for storage hot water supply.

 Thermal Storage Set (Potterton type) for storage hot water supply.

 * Air Thermostat and Clock Control (Potterton type) for automatic use in conjunction with central heating boiler.
- * These appliances will require to be in actual operation.

Technical and other details, together with sizes and all relevant measurements, also illustrations, will be supplied to intending competitors on application to the Editor, Art and Industry.

Entries must include at least one of each of the appliances mentioned but a number of any of the appliances considered suitable by the entrant can be included for effect if required.

PLAN. Provision must be made for circulation of the public, and accessibility to all exhibits for demonstration. Provision must also be made for the adequate presentation of technical and advertising literature of a standard size, namely 8½ in. by 5½ in. upright.

DECORATIVE SCHEME must include the name "De La Rue Gas Development, Ltd.," the "De La Rue" portion at least being legible at 100 ft.

LIGHTING must provide adequate illumination of the whole stand after dark, and of enclosed portions (if any) during daylight.

SCALE DRAWINGS. Half-inch plan and elevations. Perspective or isometric sketches may also be included at competitor's option.

1. All designs submitted must be the original work of the entrant and not traceable to any existing pattern or model. New ideas and new treatment, combined with workable detail and arrangement, the clarity of the drawing, and of any working drawings for the use of production engineers, plus the evidence of originality, quality, precision, orderliness of mind, and appreciation of the problem which the entry provides, will be features considered by the ludges.

judges.

2. Each entry submitted for competition must be legibly signed in block capital letters with pseudonym only and must be accompanied by the entry form legibly filled in and signed. Such entry form must be enclosed in a sealed envelope, on the outside of which is written only the pseudonym of the competitor. This envelope will not be opened until after the awards have been

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envelope, on the outside of which is written only the past petitor. This envelope will not be opened until after the made.

3. The proprietors of Art and Industry reserve to the Editor the right of withholding all or any of the prizes if the rules of the Competition have not been compiled with, or if in the opinion of the judges the entries are of insufficient merit. They also reserve to the Editor the right to reproduce in Art and Industry, or any extra number of it, its such a time as he thinks fit, any of the drawings, designs, photographs and other works submitted. They also reserve the right to exhibit all or any of the entries submitted at such place as may seem desirable. Subject to this, the copyright in all work submitted (except that of the prize winners, where the full prizes are awarded) remains the property of the entrants sending them. The copyright of the prizewinning designs, where the full prize or prizes are awarded, shall pass to the sponsors.

4. All entries (except those to which prizes are awarded) will be returned to competitors at their own risk as soon as possible after publication of the awards, provided sufficient stamps are seat in the envelope containing the coupon to cover postage or carriage and packing—the minimum in all cases being sixpence. Competitors resident abroad should send postage coupons, but stamps will be accepted.

5. All entries must be claimed within one month after publication of the awards (except those sent from remote countries, for which a period of four months will be allowed), failing which they may be disposed of as the Editor thinks fit. Neither he nor the proprietors of Art and industry will hold themselves responsible for the loss or damage of any drawings, photographs, etc., in whatever way such loss or damage may arise.
6. All entries must be sent in packed flat, except where otherwise expressly stated.

stated.

7. All entries and correspondence thereon to be addressed to the Editor. Art and Industry, 66, Chandos Place, London, W.C.2, and marked EXHIBITION STAND on the outside of the package or letter referring to it.

8. An infringement of any of the above Rules will disqualify a competitor, and the decision of the Editor shall be final on all questions arising thereunder.

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De La Rue **Exhibition Stand** COMPETITION.

This form to be cut out and posted in accordance with Rules 2 and 7.

No. of sheets sent......

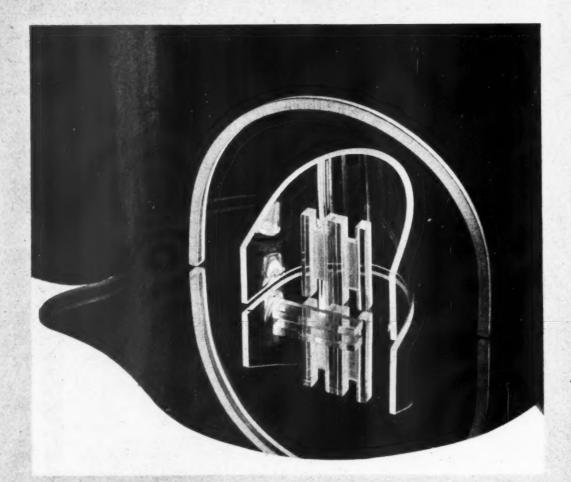
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PLEASE WRITE IN BLOCK LETTERS.

I certify the entries submitted to be my own original work.

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Revised edition of booklet on chemical seasoning methods tried in America gives details of preliminary tests with urea treatment carried out in Britain.

The treatment of timber with chemicals, particularly urea, seems to have been very successful in reducing seasoning time both for large and small timbers. The present revised edition of a previous publication gives results of recent trials in this country; these are encouraging, and if proved suc-cessful after further trials may prove of considerable importance.

17.11 construction: general FIRE SAFETY OF HOTELS

Preventing the Spread of Fire. Maurice Webster (Architectural Record [USA], February, 1947, p. 110.)

Analysis of recent hotel disasters, emphasising the importance of proper vents at the top of shafts.

17.12 construction: general FIRE-RESISTANT DORMITORY

Dormitory of Fire-Resistant Construction. (Engineering News-Record [USA], March 6, 1947, pp. 371-2.)

Dormitory for 430 women at Cornell University with floors and roof of open-web steel joists on external brick walls and internal stanchions.

The interesting feature of this building is the use of open web steel joists in the floors and roof. The joists are 8 to 14 in. deep for varying spans and loads. Typical are 12 in. joists at 23 in. centres for a 20½ ft. span and 10 in. joists at 27 in. centres for a 14½ ft. span for normal domitory loads. Two joists are used together under partitions. Diagonal bracing is fastened by wire clips at about the

third points of each span.

Impregnated reinforced kraft paper with wire mesh serves as the form for floor concrete. Both paper and mesh are stretched as tightly as possible over the joists. The paper supports the weight of a workman, but sags between joists so that the average thickness of the concrete is 2½ in. as against 2 in. minimum. The wire provides the only re-inforcement of the concrete floor. Metal lath is hung directly under the bottom chord

of the joists to carry a plastered ceiling.

The roof structure, with a slope of about 45°, consists of 14 in. deep open web joists at 2 ft. centres, spanning 25 ft. 2 × 16 in. tongue and groove concrete "nailing" planks are laid and bolted to the joists.

Slates, nailed to the planks, provide the roof surfacing.

Although the article emphasizes the fire resistance of the construction, this is only comparable with that of timber joist floors, since the only protection of the open web joists consists of the plastered ceiling.

19.14 construction: details

FRAMED PARTITIONS

Framed Partitions. BS Code of Practice CP(B)631:1946. Draft for Comment. (British Standards Institution. 10s.)

Definitions, recommendations for design in relation to specific functions. Timber. metal, reinforced concrete frames for partitions. Spacing of framing members for various types of covering. Fibre building board, gypsum plasterboard, plywood, synthetic resin bonded paper sheet, asbestos cement and asbestos composition sheet, wood wool slab coverings.

This code deals generally with framework and covering or infilling, which together form a framed partition. It discusses the choice of type and materials both for the framework and the covering; sound insulation; sound absorption; fire resistance and com-bustibility; thermal properties, avoidance of crack formation; strength, stability and resistance to impact; dimensional standards; provision for services and fittings; durability; methods of fixing coverings; joint treatment. Many illustrations of examples of fixing and connecting non-loadbearing partition frames

and joint treatments are given.

This considerable document, comprising 140 pages, contains useful data on the physical properties of the various materials that can be used in framed partitions; it will be of great help to designers in the selection of the most suitable material for any particu-lar purpose and the arrangement of many

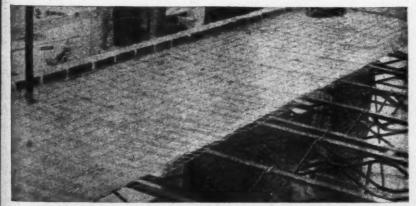
23.21 heating and ventilation HUMIDITY: DEFINITIONS, FORMULÆ

Humidity of the Air. Definitions, formulæ and constants. BS. 1339:1946. (British Standards Institution, 2s.)

Definitions of terms such as absolute humidity, dew point, etc. Notation. Formulæ.

24.21 lighting DAYLIGHT MEASUREMENT

Illumination from Sources of Large Area. P. Hartill. (Trans. Illum. Eng. Soc., November, 1946, p. 253.)



Tar impregnated paper with wire reinforcement, used as form for 2½ in concrete floor; wire does duty as concrete reinforcement as well. See No.17.12.

New web diagram for computing illumination from windows and large sources. Illus-

The author introduces a new web diagram for computing daylight factors and intensities of light from large-area sources. It seems doubtful if any advantage is to be gained in practice from the method.

25.18 ater supply and sanitation CLOTHES WASHING.

Hotter Water for Home Washing Machines, Frank Steel. (Plumbing and Heating Journal, USA, February, 1947.)

Results of extensive survey of hot water usages with automatic clothes washers. Useful tables and indication of Monday wash habit changing with increased use of automatic washers.

This article is based on information from the Westinghouse Co., who have issued a full report in booklet form (Hot Water Requirements of Automatic Washers).

The conclusions reached are that the use of modern automatic washing machines which also do rinsing and some degree of which also do rinsing and some degree of drying, brings considerable changes. First, the Monday wash day habit becomes less rigid. Most people do some washing on Monday but frequently do two more small washes on other days. Water temperatures are higher because of the absence of handling hot west clother. Conclusion machading ling hot. wet clothes. Conclusion reached is that 140-145 deg. F. is the optimum temperature and that this should affect hot water supply systems. Useful data is given on quantity of hot water used. This is based on wide scale survey.

This feature answers any question connected with building confidentially and free of charge. Questions to the Technical Editor, The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1.

OUESTIONS AND ANSWERS

2894 PRICES: FACTORY BUILDINGS

Q I require a rough check on a cube price for a proposed new building. The building is a factory building, an extension to existing, but would come under the general heading of:—Factory building—single storey—height to eaves 17 ft. 0 in—wood block on concrete floor—9 in. brick clothing on steel frame—steel roof trusses—span 30 ft. 0 in.—length of building approx. 120 ft. 0 in.—Robertson's Protected Metal on South slope of road-morth tected Metal on South slope of roof-north

light glazing.

My first price is based on 1s. 6d. per foot cube plus 884 per cent. increase. Can you confirm this?

A Estimating factories by means of a cube is not always satisfactory as additional height can increase the cubic con-tents without increasing the cost proportionately.

We would expect the proposed building to cost approximately 27s. 6d. per ft. sup. plus any additional costs of connecting up to the

existing building.

Any such estimating methods must be considered very approximate at the present time, and a reasonably accurate estimate can only be obtained by measuring and valuing approximate quantities.

WOOD CASEMENT WINDOWS



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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 Philip Scholberg]

BRITISH INDUSTRIES FAIR

When you add up the floor space at Castle Bromwich, Olympia and Earls Court, the answer comes to something like twenty acres, in which there are rather more than 3,000 exhibitors. These notes, which are perforce written the day after the official opening, cannot possibly be a reasoned review of the exhibits, many of which have been on the market for a number of years, but should be regarded as no more than a series of brief references to a few of the high spots noticed during a somewhat

hurried tour. Castle Bromwich to start with: The buildings are still a bit depressing from the railway, but they have been given a smart new face to the road approach, with adequate entrance doors and beflagged central feature flanked by camouflage netting and banners on a tubular framework, the latter a successful and presumably quite cheap treatment. Inside, the building section contains every-thing from builders' plant to tiles, heating appliances and examples of methods house construction, and the hardware section should also be visited, even though it means looking at miles of pots and pans before you find the door furniture and plumbers' goods. Stand design, with none of the Olympia and Earls Court controls, is much as one would expect, notable exceptions being ICI, Tube Investments, and Reynolds, all in the engineering section. Really new devices are comparatively few, Sadia show a most interesting device for extract-ing waste heat from the flues of solid fuel appliances and using it for water heating. Test figures give astonishing results and will be dealt with at greater length in a few weeks time. Radiation have a new Eagle slow combustion stove designed to burn any domestic fuel from coke to anthracite. is available for building-in or as a free standing type, and is also made with or without a boiler. From the design point of view it seems one of the best of the slow combustion stoves, which have always tended to be rather unsightly, and it is finished in vitreous enamel in various finished in vitreous enamel in various colours. The illustration on this page shows a cream body with green doors, and there is less contrast between the colours in actual fact than would appear from the photograph. The bars in the doors are small enough for the fire to look quite cheerful, and I was interested to see that the mica panels are protected with a light and almost unnoticeable wire mesh, a good Doint, as the mica pearly always gets broken point, as the mica nearly always gets broken and the draught control is then all over the place. Incidentally, mica has never been

really satisfactory for fire doors. Is it not time for some manufacturer to try using a silica glass which will stand up to the heat and yet be fairly easy to clean? Price is approximately £15. (Radiation Ltd., Stratford Place, W.1, or Eagle Range and Grate Co., Aston, Birmingham, 6.)

Olympia and Earls Court, with panels of

architects to advise on stand design, show a Castle considerable improvement over Castle Bromwich. With shortages of labour and materials it is obvious that advice cannot be quite as effective as it should, but the effort has certainly been worth while and should show even better results next year. At Earls Court the main interest is in the furniture and plastics sections, which fortunately next door to each other.
Although most of the furniture is wellmade, the majority of it is deplorable
period reproduction stuff which the majority of foreign buyers presumably expect this country to produce. The further one walks among these stands the more depressed one becomes, and it is with a sense of real relief that one finds Heals, who are showing a new and most interesting range of Plymet furniture designed in their studios by Clive Latimer. In these designs the frames are made of light alloy flats or angles, welded where necessary, and the panelling is veneered 18 gauge duralumin. Legs are tapered H section light alloy castings, to which any necessary stretchers are welded. The veneers are fixed by a bonding process known as Redux, which has been developed during the war by Aero Research of Dux-ford. The strength of the bond is very high, with the result that the veneers can be bonded flat in a press and the bending carried out afterwards in ordinary sheet metal bending rolls. The radius of some of the curves in this furniture is as small as 3 inches, but this can be done fairly easily, though for bending at right angles to the grain it is necessary to soak the panels in hot water.

The heat conductivity of the duralumin core is very high, with the result that it is possible to leave lighted cigarette ends on the veneer without marking it, as the heat transfer is so rapid that the veneer never reaches charring temperature.

Tables, chairs and a sideboard have been produced for the dining room, and there is also a full range of bedroom furniture, and no dockets are needed. Prices, thanks to the purchase tax, are fairly high, but at least here is something else which is available now. (Heal & Son, 196, Tottenham Court Road, London, W.1.)

In the plastics section there are no very remarkable developments. Dufaylite, described in these notes last autumn, is shown in sample panels and in curved moulded shapes. Bakelite and one or two other firms show a panelling board suitable for furniture, for flooring, made up of bonded sawdust or even carpenter's shop floor sweepings. Bakelite also show their Warerite panelling which can be faced with almost any fabric under a transparent plastic coating.

From a display point of view both the leather and textile groups are worth a visit, though the standard of design of a good deal of the leather goods still remains fairly low and only improves in the rather high price

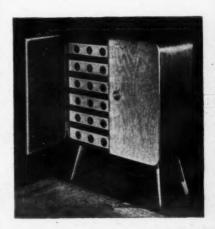
Olympia contains nothing of very great interest, though I found quite a useful little portable drawing board in the instruments section. It is called the Klippit, and measures 13½ by 10½; about an inch bigger

Radiations' new Eagle slow combustion store to burn any domestic fuel from coke to anthracite.

than this Journal, and small enough to go in the average brief case. The board itself is aluminium with a spring clip for the paper down the left hand side and a transparent horizontal rule which is fixed 'o a slide and is used as a tee square; there is also a vertical scale on the right of the board. The aluminium board is stiff enough not to distort unduly, and a piece of card under the drawing paper will allow you to use dividers or compass. A device of this kind is probably more use to engineers and the other people who are terrified of drawing anything freehand, but it might well come in handy on the site or in a train if you have forgotten your squared paper. The price is 39s. 6d. (Machine Shop Equipment, Ltd., Allington House, 136/142, Victoria Street, London, S.W.1.)

At Olympia there are also some well made plan chests and filing cabinets in the office furniture section and some macabre amusement to be found in the Gallery (Novelties and Fancy Goods). Here the clank of the presses as the Benares trays come rolling off the production line is almost inaudible, and there is hardly anything worth even a passing glance except the sports equipment, much of which is ad-

mirable.



An example of Plymet furniture designed by Heals with frames of light alloy and panelling in veneered duralumin The form printed below is to assist readers requiring up-to-date information on building products and services. Complete and post it to The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1, and the advertisers listed will be asked to supply information direct.

ENQUIRY FORM

Journal.	in this	issue	of "	The A	rchitects'
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A.J.15.5.47

Announcements

Mr. Geoffrey Pickup has sailed for Hong Kong. His address will be c/o Butterfield and Swire, Hong Kong, China, where he will be glad to receive trade catalogues and technical information from firms concerned in exporting to China, or contemplating exporting.

Mr. John Edward Deleuse, A.R.J.B.A., having passed the qualifying examination, has been awarded the RIBA Diploma in Town Plan-

Messrs. Denny, Mott and Dickson, Ltd., have appointed Mr. H. R. Adams to assist Mr. W. R. Bousfield in the management of their Plywood, Wallboard and Plastics Department. Mr. Adams was well known in the plywood trade before the war.

We are informed by the Organiser of the

We are informed by the Organiser of the Daily Mail Ideal Home Exhibition that Mr. Ian Jeffcott, L.R.I.B.A., R.D.I., has resigned his appointment as Exhibition Architect to Associated Newspapers, Ltd. He will resume his practice in Architecture, Stage Designing, Exhibition Architecture and Display at 14, Airlie Gardens, Kensington, London, W.8 (Park 5003). The Daily Mail has commissioned him to act as consultant with regard to the architecture and design of future exhibitions.

exhibitions.

Arising out of the eighth Congress of Scientific Films held in Paris in October, 1946, and the subsequent exchange of ideas between the Institut de Cinematographie Scientifique, Paris, and the Scientific Film Association, London, and observers from UNESCO, Czechoslovakia, Poland, Sweden and USA, it was agreed that it was necessary to establish an international scientific film organization. After preparing a draft constitution, the British and French organi-

zations have been meeting in Paris to complete arrangements for an inaugural congress, to which all countries are being invited, to be held in Paris at the beginning of October, 1947. It is hoped that the proposed Association will assist in the provision of a number of practical and urgently needed services, especially the freest, widest and most efficient exchange of information about the production, use and effect of all types of scientific films, films themselves, and cinematographic material and the personal experience, skills and ideas of workers in this field.

Messrs. Rushton, Howard and Partners, Chartered Architects and Surveyors, have opened offices at 17, Fleet Street, E.C.4 (phone, Central 2669 and 2660), and will be pleased to receive price lists, catalogues and literature.

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The North of Scotland Hydro-Electric Board have just published constructional scheme No. 8—a scheme for the electrical development of Kintyre, Argyllshire, consisting of a hydro-electric project in Glen Lussa and transmission lines to the coastal villages and to farms and cottages on both sides of the Kintyre peninsula between Campbeltown and Tarbert, Electricity produced by the generating station in Glen Lussa will also provide additional supplies of power for industrial development in Campbeltown. Seventy-five per cent. of the population between Campbeltown and Tarbert will receive a supply. The power will be supplied by the Board to the existing electricity undertaking—the Campbeltown and Mid-Argyll Electric Supply Co., Ltd.—under a special arrangement. Existing consumers in Campbeltown and the Tarbert-Ardrishaig area will benefit by a reduction in tariff rates. The scheme will cost £480,000 and will provide employment at the peak to about 400 men.

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We have already referred to deal block floorings for Housing (the Minister of Health has informed us that he will allow us to supply and lay this class of flooring in standard houses) and we have plenty in stock. Inasmuch as the Board of Trade (Timber Control) has seen fit to impose a charge, payable on demand, of £19 15s. Od. per standard on all stocks of softwoods, we must look round for some sort of substitute. Hitherto, we have not tendered for composition floorings as we did not consider the synthetic magnesite (manufactured from seawater) suitable for this class of flooring. Now, however, that we can obtain the genuine imported mineral magnesite, we are able to give the 100% guarantee that clients are entitled to, and shall be happy to submit quotations for this type of flooring. It is obtainable in red, brown and/or buff.

For more substantial buildings (schools, factories, offices, etc.) we still have large stocks of the more expensive timbers—oak, Canadian birch, African hardwoods in both block and strip—and we can submit prices for these floorings for more or less immediate execution. If clients require a parquet floor, we can commence any job inside 48 hours, provided you have a Ministry of Works Building Licence.

Should you have floors that are badly worn, we can clean off, reface, and waxpolish, using electrically or petrol driven surfacing machines.

Finally, there is our Fluid Glass treatment for linoleum. An application of this solution to lino, and you will have a non-slip highly polished waterproof surface, which will last for many months.

Please send us your enquiries.

Yours faithfully,

The Philip Flooring Company.

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(For 39 years connected with Messrs. Jos. F. Ebner, Ltd.)

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B.N.E. domestic appliances at your nearest J. & P. Branch—it is there to give you service and its staff is anxious to help you. Specialist domestic engineers are available to advise on water heating, space heating, cooking and other applications of B.N.E. domestic appliances. There are J. & P. Branches at:—

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Suffolk House, 6 Town Hall St. 47 Broadmead

CARDIFF: GLASGOW: IPSWICH: 10 Westgate St. 205 Bothwell St. 5 Arcade St.

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TRINIDAD MASTIC ASPHALT

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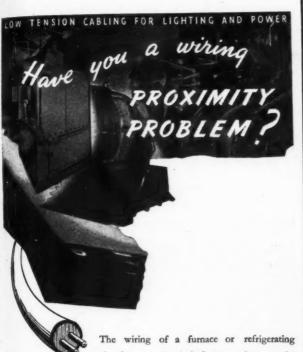
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chamber, a chemical factory mixer or the salt-laden forecastle of a tanker . . . each sets its own particular "proximity problem"-how will the cable stand up to these unavoidably punishing conditions? "Pyrotenax" supplies the adequate answer in all such cases, for being made entirely of copper and mineral insulant, they are for all practical purposes indestructible and everlasting. Their tough copper sheath keeps their mineral insulant intact, even when subjected to the grossest ill-usage. By the same token they cannot be damaged by oil, water or condensation . . . and being inorganic they are inherently resistant.

> FIRE RESISTANT * UNAFFECTED BY OIL, WATER, CONDENSATION, ACCIDENTAL OVERLOAD OR GROSS ILL-USAGE * EASY TO INSTAL *



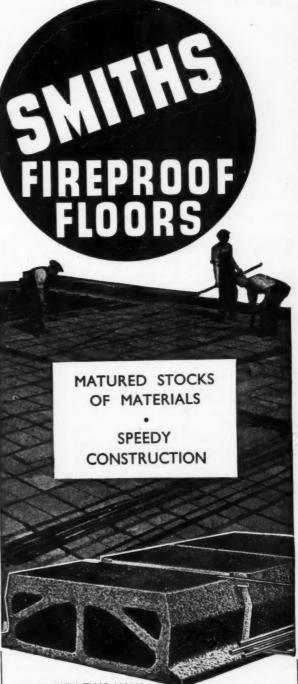
"Pyrotenax" is an exclusive trade mark name and must only be used to designate cables and other products manufactured by this Company and its associates.

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reinforced fireproof floor can be employed immediately for any flooring or roofing requirement. It is constructed with standardised pre-cast hollow concrete blocks.

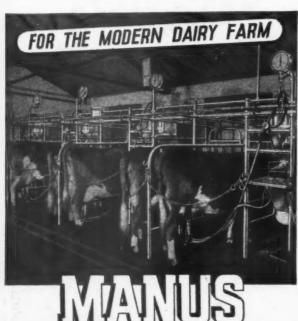
The employment of patent telescopic centers permits the immediate use of the floor with the additional advantage of their removal in the minimum of time.

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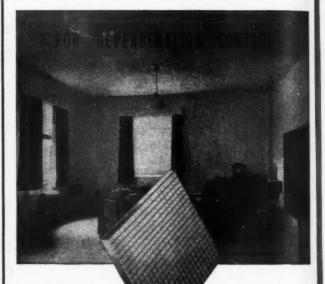
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on his mind

The foreman has had a busy day, walking, talking, checking, advising. His workers have had a tough day too-sweating inside on a hot summer day with bad ventilation and stifling air. A lot he'd give to be "seaside cool"; to have a breath of fresh air. He knows that Air-Conditioning Equipment would solve the problem and help his workers to step-up output.

And he knows too, that what is wanted is Musgrave Air Conditioning Equipment. He intends to pass that information on to his Managing Director at the first opportunity.



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A HOUSE BUILT ON EXPORTS

E in the wood trade are as keen as any to see our export figures rise. We know that it's what we sell abroad that earns the cash to pay for the wood we have to import. And while we're naturally sorry it's temporarily scarce we take a little comfort from being in the same boat with other importers of key raw materials-fuel-oil, certain types of steel, and the like. But that doesn't help us with to-day's shortages. Right now, commonsense tells us it might pay to study modern principles of timber usage; maybe we could pick up a dodge or two to make our limited supplies do a better job. That's where Travis & Arnold's Technical consultant comes in-and stays in. He may be able to help you in your current difficulties-and you and he certainly ought to get together for the future. When there's more timber you'll have more scope to introduce new ideas in utilisation-so keep your eye on Timber Technology!



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CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal," of the address given above.

at the address given above.

Public and Official Announcements Siz lines or under, 10s.; each additional line, 1s. 6d.

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SCRUTTORS MAINTAINS A register of qualified architects and surveyors (including assistance) sequiring posts, and invites applications from public authorities and private practitioners having staff vacancies. Aparess: 75, Haton Race, London, S.W.1. Tel. BLOAME 5416.

LONDON COUNTY COUNCIL.
VACANCIES FOR PLANNING STAFF IN THE
ABCHITECTS DEPARTMENT FOR WORK ON
THE COUNTY OF LONDON PLAN.
Applications are invited for a number of positions in the following grades—
PLANNING OFFICER (Grade III), up to £700

PLANNING OFFICER (Grade III), up to £700 a year.
TECHNICAL ASSISTANT, up to £580 a year.
Commencing rate of pay will be according to qualifications and experience.
There will be opportunities for competing, on merit, in due course for permanent appointment and for positions in the higher grades on the occurrence of vacancies. Buccessful candidates will be subject to the Council's Superannuation, and Frevident Fund.
The planning work involved includes assistance in the detailed development of Reconstruction from the planning work involved includes assistance in the detailed development of Reconstruction from the planning to the planning plans.
A knowledge of current town planning legislation is desirable in all cases, and candidates for Grade III positions should poseess architectural or surveying or town planning qualifications. Other things being equal, preference will be given to candidates registered under the Disabled Persons (Employment) Act, 1944, and ox-Service ness and women will also receive special consistration.

new and wisterston.

Application should be made to the Architect to the Council, County Hall, Westminster Bridge, S.E.I, for forms of application (enclosing stamped adtressed ovvelope), returnable not later than ten days from this date.

Caavassing disqualities.

BOROUGH OF HARTLEPOOL.

APPOINTMENT OF ARCHITECTURAL

ASSISTANT.

Applications are invited for the appointment of
Architectural Assistant, in the Borough Engineer's
Department, at a salary in accordance with
Grade III of the A.P. and T. Division of the
National Scales, vis. £390×£15 to £435 per
annum, plus cost-of-living bonus (at present
£59 16s. per annum).

Candidates must have had previous experience
of work in connection with municipal housing
states.

of work in connection with an architectural Assistant, stating age, qualifications and experience, and accompanied by the names of three persons to whom reference may be made, must reach the undersigned not later than Friday, the 23rd May,

In the event of the successful applicant being married the Council will provide housing accommodation.

ARTHUR USHER, Town Clerk. Berough Buildings, Hartlepool.

Borough Buildings, Hartlepool.

BOROUGH OF CHELMSFORD.

BOROUGH OF CHELMSFORD.

ENGINEER AND SURVEYOR'S DEPART.

Applications are invited for the following permanent appointments within the scale stated, plus cost-of-living bonus, at present £59 16s.

(a) QUANTITY SURVEYOR (Grade V).

Salary, £460-£510.

(b) ARCHITECTURAL ASSISTANT (Grade IV).

(Special maximum £480) £420-£480.

(c) ARCHITECTURAL ASSISTANT (Grade III). Salary, £390-£435.

Applicants must have the recognized qualifications and experience for the various appointments, which are subject to the provisions and conditions of service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, and will be terminable by one month's notice on the side.

Applications, stating age, qualifications, present and previous appointments, and general experience, together with copies of three recent testimonials. Should be forwarded to reach the undersigned by not later than Wednesday, 21st May, 1397. Canvassing in any form will disqualify.

VINCENT J. WILLIS, M.Inst.M. & Cy.E., Revenue Engineer and Surveys.

VINCENT J. WILLIS, M.Inst.M. & Cy.E.,

Municipal Offices, Rainsford House,
Duke Street, Chelmsford.

1st May, 1947.

LONDON COUNTY COUNCIL.

Required at the Brixton School of Building, Ferndale Road, S.W. 4, two Full-time LECTURERS in the senior school courses in Building, Architecture and Surveying. Candidates' qualifications should be in accordance with one of the following:—(a) Fellow or Associate R.I.B.A., or comparable qualification, with special interest in Architectural Draughtsmanship and Design in Studio work. Diploma at a recognized school of architectural desirable. (b) P.A.S.I. or comparable qualification, with special interest in Quantities and Land Surveying. The appointments will be temporary in the first instance, but may subsequently be made permanent. Burnham scale salary, plus London allowance. Form of application and further particulars from the Principal of the School (stamped addressed foolscap envelope necessary), returnable by 21st June, 1947. (1414)

BOROUGH OF BACUP.

BOROUGH ENGINEER AND SURVEYOR'S

DEPARTMENT.
Applications are invited for the appointment of ARCHITECTURAL ASSISTANT, at a salary in accordance with Grade III of the A.P. and T. Division of the National Scale of Salaries, i.e., 2390—215—2435, plus cost-of-living bonus, at present £59 19s. 4d. per annum.

The appointment is temporary in the first instance and, subject to satisfactory service, will be made permanent at the end of 12 months. If the successful applicant is from outside the Borough, a Council house will be made available if required.

Applications, addressed to the Town Clerk, and accompanied by copies of two recent testimonials, must be received not later than 31st May, 1947.

LAWRENCE P. WHITE.

Acting Town Clerk.

Municipal Offices, Bacup. 29th April, 1947.

COUNTY BOROUGH OF GREAT YARMOUTH.
BOROUGH ENGINEER'S DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL
ASSISTANTS.
Applications are invited for the following

Applications are invited for the following appointments:—

(a) SENIOR ARCHITECTURAL ASSISTANT (Permanent) at a salary in accordance with Grade V of the National Scale of Conditions of Service, commencing at £460 per annum, rising to a maximum of £510 per annum, plus cost-of-living bonus, at present £59 16s.

(b) JUNIOR ARCHITECTURAL ASSISTANT (Temporary), at a salary of £270 per annum, rising by annual increments of £15 to £300 per annum, plus cost-of-living bonus, at present £59 16s.

Applications for appointment (a) should be

rising by annual increments of £15 to £300 per annum, plus cost-of-living bonus, at present £59 16s.

Applicants for appointment (a) should be Associates of the Royal Institute of British Architects, and must have had experience in design and construction, particularly in relation to housing, schools, and public buildings.

Applicants for appointment (b) should have had a thorough technical training, and preference will be given to candidates who have passed the Intermediate Examination of the Royal Institute of British Architects.

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, should be enclosed in an envelope endorsed with the title of the appointment for which the application is made, and must reach the undersigned not later than noon on Monday, the 26th May, 1947.

The appointments will be terminable by one month's notice on either side, and appointment (a) will be subject to the provisions of the Local Government Superanuation Act. 1937, and to the passing of a medical examination.

Cânvassing, directly or indirectly, will be deemed a disqualification, and candidates must disclose in writing whether, to their knowledge, they are related to any member, or holder of any senior office under the Council. Candidates who fail to do so will be disqualified and, if appointed, will be liable to dismissal without notice.

FARRA CONWAY,

Town Hall, Great Yarmouth,
2nd May, 1947.

Town Hall, Great Yarmouth, 2nd May, 1947.

WEST MIDLANDS JOINT ELECTRICITY
APPOINTMENT OF CIVIL ENGINEERING
AND BUILDING DRAUGHTSMEN.
The above-named Authority desire to appoint
Civil Engineering and Building Draughtsmen in
connection with the preparation of constructional
drawings for important generating station extensions.

sions.

Preference will be given to applicants who have had a wide experience in civil engineering and building work.

The appointments will be for the duration of the work which it is estimated will be about three

the work which it is estimated.

The salary in each case will be in accordance with ability and experience.

Applications must be made on the prescribed form, which may be obtained from the address below, and should reach me not later than the 22nd May, 1947.

H. F. CARPENTER.

H. F. CARPENTER.

Clerk and Manager.

Wolverhampton.

Wolverhampton.

COUNTY BOROUGH OF BARNSLEY.
APPOINTMENT OF SECOND ASSISTANT
ARCHITECT.
Applications are invited for the appointment of
a Second Assistant Architect, on the permanent
establishment of the Borough Engineer and Surveyor's Department.
The salary will be in accordance with A.P.T.,
Grade IV, of the National Scale of Salaries, commencing at £420 per annum, rising to £465 per
annum, plus cost-of-living bonus, at present
£59 16s.

annum, plus cost-of-living ponus, av 259 16s.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the passing of a medical examination, and will be terminable by one month's notice on either side, and will also be subject to the general conditions of service within the Corporation, as varied from time to time.

Applicants should be Registered Architects, and applications, stating age, qualifications and experience, together with copies of two testimonials, should reach the Borough Engineer and Surveyor, Town Hall, Barnsley, not later than the 26th May, 1947.

Town Hall, Barnsley, not late.

May, 1947.
Canvassing, either directly or indirectly, will be deemed a disqualification.

A. E. GILFILLAN,

Town Clerk.

912

Town Hall, Barnsley.

CORPORATION OF LONDON.
CITY SURVEYOR'S OFFICE.
APPOINTMENT OF TECHNICAL STAFF.
Applications are invited for the following appointments, in the City Surveyor's Office:
ASSISTANT ARCHITECTS and SURVEYORS.
Salary up to 2475 p.a. (inclusive of consolidated bonus), according to age, qualification and experience.

bonns), according to age, qualification and experience.

Applicants should either have qualified or be about to qualify for Associate Membership of the Royal Institute of British Architects, or Associate Membership of the Royal Institution of Chartered Surveyors (Building Sub-division).

The appointments are for the present on a temporary basis, and will be concerned principally with the reinstatement of war damage to a variety of types of properties. In the event of establishment to the permanent staff, temporary service will count for the purposes of superannuation. Such appointments will be subject to the provisions of Local Government Superannuation, and applicants will be required to pass a medical examination.

Previous experience with a Municipal body is not essential.

Applications, endorsed "Technical Staff," to be made to George Holliday, F.S.I., City Surveyor, 55-61, Morgate, E.C.2, giving the following particulars:—Service with Armed Forces, age, qualification or intentions in connection therewith, previous training, positions and experience, date when available to commence duties if selected, together with copies of two testimonials. 915

BERKSHIRE COUNTY COUNCIL.
APPOINTMENT OF TECHNICAL STAFF.
Applications are invited for the following appointments, in the County Architect's Depart-

appointments, in the County Architect's Department.

(a) SENIOR ASSISTANT ARCHITECT, at a salary of £460 per annum, rising by two annual increments of £15 and one of £20 to a maximum of £510 per annum (A.P.T., Grade V), plus bonus.

(b) TWO ASSISTANT ARCHITECTS, at a salary of £390 per annum, rising by three annual increments of £15 to a maximum of £435 per annum (A.P.T., Grade III), plus bonus.

(c) ENGINEERING ASSISTANT, at a salary of £460 per annum, rising by two annual increments of £15 and one of £20 to a maximum of £510 per annum (A.P.T., Grade V), plus bonus.

The cost-of-living bonus is at present £59 16s. per annum.

ments of Els and one of Essa of the sum.

The cost-of-living bonus is at present £59 l6s. per annum.

Candidates for appointment (a) should be associate Members of the Royal Institute of British Architects, or hold an equivalent qualification, and should preferably have had experience in the type of work carried out by County Councils, and be able to take charge of contracts. The possession of a car is not essential but would be an advantage, and car allowance will be paid on the Council's scale.

Candidates for appointment (b) should be registered Architects, with considerable experience of preparing working drawings with the minimum of supervision.

Candidates for appointment (c) should be members of the Institution of Heating and Ventilating Engineers, and should have had wide experience in design and supervision of heating, hot water supply, electrical and general mechanical installations.

All the appointments will be subject to the Local Government Superannuation Act, to one month's notice on either side, to the successful candidates passing a medical examination, and to the Council's General Conditions of Service for Administrative, Professional, Technical, and Clerical Staff for the time being in force.

Other factors being equal, preference will be given to registered disabled persons.

Application forms can be obtained on receipt of a stamped addressed envelope from the County Architect, 55, Bath Road, Reading, to whom they should be returned completed, together with copies of three recent testimonials, on or before Saturday, 31st May, 1947.

H. J. C. NEGBARD,

Shire Hall, Reading.

Shire Hall, Reading.

BOROUGH OF SURBITON
BOROUGH SURVEYOR'S DEPARTMENT.
APPOINTMENT OF QUANTITY SURVEYOR.
Applications are invited for the permanent
appointment of a Quantity Surveyor, at a salary
in accordance with Grade A.P.T.Y of the
National Scheme of Conditions of Service, namely
£460 per annum, rising by two annual increments of £15 and one of £20 to a maximum of
£530 per annum, plus bonus, which is at present
at the rate of £55 16s. per annum. The salary
stated includes the "weighting" for the London
area.

Applicants should be Chartered Quantity Surveyors, with extensive experience in the preparation of Bills of Quantities, specifications, contracts and measurements of completed works, particularly in respect of municipal housing schemes. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination.

Applications, on forms to be obtained from the undersigned, must be delivered not later than 28th May, 1947.

Canvassing, either directly or indirectly, will disqualify.

R. H. WRIGHT, Town Clerk.

Council Offices, Surbiton.

Council Offices, Surbiton.

222

NORTH RIDING OF YORKSHIRE COUNTY
COUNCIL.
COUNTY ARCHITECTS' DEPARTMENT.
Applications are invited for the appointment of
SENIOR ASSISTANT ARCHITECT, Grade
A.P.T., V. of the National Scales (£460-£510),
plus coat-of-living bonus (at present £59 16s.
per annum).
Applicants must have had experience in the
Architect's Department of a Local Authority.
Appointment terminable by two calendar
months' notice on either side, and subject to the
Local Government Superannuation Act, 1937, and
a satisfactory medical examination.
Forms of application are not being issued, but
if further information is required it may be
obtained from J. Catchpole, A.R.I.B.A., County
Architect, County Hall, Northallerton. Applications, stating age, qualifications and experience,
together with particulars of present and previous
appointments, and the names and addresses of
three persons to whom reference can be made,
must be delivered to the undersigned not later
than Saturday, 31st May, 1947.
Canvassiag, directly or indirectly, will be
deemed a disqualification, and candidates should
state, in writing, whether they are related to any
member of the Council, or to the Head of any
Department or his standing Deputy.

1. Gerk of the County Council.
County Hall, Northallerton.
May, 1947.

COUNTY BOROUGH OF BRIGHTON.
BRIGHTON TECHNICAL COLLEGE.
Principal: G. E. Warrs, M.A., Ph.D., F.R.J.
Applications are invited for the follow appointments:—

Principal: G. E. Warrs, M.A., Ph.D., F.R.I.C. Applications are invited for the following appointments:—

(a) LECTURER IN CIVIL ENGINEERING, who should be a Corporate Member of either the Institution of Civil Engineers or the Institution of Structural Engineers, and also preferably an Honours Graduate in Engineering.

(b) TWO LECTURERS IN BUILDING SUBJECTS, who should hold approved qualifications in Architecture. Building or Structural Engineering, and one of whom should have special qualifications and experience in Quantity Surveying.

The salaries will in all cases be in accordance with the Burnham Technical Scales, with full allowances for approved research, industrial and teaching experience, and for war service. The persons appointed will be required to take up their duties in September, 1947.

Further particulars and forms of application may be obtained from the undersigned. The completed forms should be returned with copies of two recent testimonials to the Principal, Technical College, Brighton, 7. within two weeks of the appearance of this notice.

Bucation Office.

Bucation Office.

**BORDUIGH OF POVAL TUNNPRINGER WELLS.

Education Office, 54, Brighton, 1.

BOROUGH OF ROYAL TUNBRIDGE WELLS.
Applications are invited for the appointment
of ARCHITECTURAL ASSISTANT, in the
Borough Surveyor's Department, for the period
of approximately three years, on Grade IV (£420×
£15-£465) of the National Scale of Salaries, plus
cost-of-living bonus, at the rate from time to

in force. flat will be provided by the Council if required.

required. Successful candidate will be required to contribute under the Local Government Officers' Superannuation Act, 1937, and to pass a medical examination. Applicants should state in addition to the usual particulars whether to their knowledge they are related to any member or senior officer of the Council.

Applications, together with copies of not more than three testimonials, should be delivered to Mr. H. P. Bishop, Borough Surveyor, Town Hall, Tunbridge Wells, not later than Saturday, 24th May, 1947.

JOHN WHITEHEAD, Town Clerk

Town Hall, Tunbridge Wells,

THE UNIVERSITY OF LIVERPOOL.
LEVER CHAIR OF CIVIC DESIGN.
The Council of the University of Liverpool invites applications for the Lever Chair of Civic Design, at a salary of £1,450 per annum, together with superannuation within the Federated Superannuation System for Universities.

The appointment will date from 1st October, 1947, or from such later date as may be arranged. Further particulars may be obtained from the undersigned, by whom applications (12 copies) should be received not later than 21st June, 1947.

STANLEY DUMBELL.

STANLEY DUMBELL. Registrar

April, 1947.

April, 1947.

BOROUGH OF ANDOVER.

APPOINTMENT OF ARCHITECTURAL

ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant, in the office of the Borough Surveyor, at a salary on the National Joint Scale, A.P.T., If and III, 2366, rising to 2435, plus cost-of-living bonus, commencing salary according to qualifications and experience.

The appointment will be subject to the Local Government Superannuation Act, 1937, and to the National Conditions of Service.

Candidates should possess an architectural qualification, and be experienced in the design and erection of houses and other Municipal bulldings, and preference will be given to a candidate having experience in town planning.

Applications, endorsed "Architectural Assistant," should be delivered to the undersigned not later than Monday, 2nd June, 1947, and be accompanied by not more than three recent testimonials, and full particulars

Canvassing, either directly or indirectly, will be a disqualification.

E. G. O. GARDINER.

Town Clerk's Office, "Beech Hurst,"

Weyhill Road, Andover, Hants.

6th May, 1947.

COUNTY OF LINCOLN—PARTS OF LINDSEY.

COUNTY OF LINCOLN-PARTS OF LINDSEY.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments:—
DEPHILIP COUNTY ARCHITECT'S

Applications and learners appointments:

DEPUTY COUNTY ARCHITECT, at a salary of £700 per annum, rising by annual increments of £55 to £850, plus bonus.

PRINCIPAL ASSISTANT ARCHITECT (Grade VIII), £625 per annum, rising by annual increments of £25 to £700, plus bonus.

The cost-of-living bonus is at present £59 16s.

The annum.

per annum.

Candidates must have passed the qualifying examination for A.R.I.B.A., be proficient in design, and have had experience in the control of staff. Applicants must have a knowledge of Local Government administration and procedure, and be able to drive a car, which must be provided by the person appointed and for which an allowance on the County Council's scale will be paid. per annum.

paid.

Applications, stating age, training, experience and qualifications, together with copies of two recent testimonials, and the names of two persons to whom reference can be made, should be sent to the County Architect, County Offices, Lincoln, not later than 26th May, 1947.

ERIC W. SCORER.

Clerk of the County Council.

County Offices, Lincoln.



CITY OF LEICESTER EDUCATION

COMMITTEE.

COLLEGE OF ART.

Principal: KENNETH HOLMES, A.R.C.A.
SCHOOL OF ARCHITECTURE.

Applications are invited for a Full-time
INSTRUCTOR for Third, Fourth and Pitth Year
work. Previous experience in teaching is noy
essential, but administrative ability is desirable. Applicants must have passed the Flaal
of the R.I.B.A. or its equivalent.

The post is available for the Autumn Term.
1947.

Salary is in accordance with the Burnham

Scale, plus an anomal bility.

Applications (no special forms) should be sent to the Registrar, College of Art, The Newarks, Leicester, not later than 29th May, 1947.

ELFED THOMAS,

Director of Education.

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MIDDLESEX COUNTY COUNCIL.
QUANTITY SURVEYING ASSISTANTS required: (a) A.P.T., Grade VII, commencing salary £595 to £60 p.a.; (b) A.P.T., Grade VI, commencing salary £595 to £620 p.a., plus any temporary bonus (now £60 p.a.). Duties include all stages in preparation of bills of quantities, final accounts, site measurement, specification writing, etc. Established and pensionable subject to medical exam. Written applications, stating qualifications, age, experience, etc., to County Architect, 20, Vauxhall Bridge Road, S.W.1, by 27th May (B770 A.J.).

C. W. RADCLIFFE.
Middlesex Guildhall, S.W.1.

SURVEY SURVEY** SURV

BOROUGH OF SURBITON
BOROUGH SURVEYOR'S DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.
Applications are invited for the permanent appointment of an Architectural Assistant, at a salary in accordance with Grade A.P.T./III of the National Scheme of Conditions of Service, namely 2410 per annum, rising by annual increments of £15 to a maximum of £455 per annum, plus bonus, which is at present at the rate of £59 15a, per annum. The salary stated includes the "weighting" for the London area.
Applicants should be Registered Architects and/or Members of the Royal Institute of British Architects, or hold similar qualifications. Experience in housing work of a local authority would be an advantage.
The appointment is subject to the provisions of the Local Government Superanuation Act, 1937, and to the successful candidate passing a medical examination.
Applications, on forms to be obtained from the undersigned must be delivered not later than

medical examination.

Applications, on forms to be obtained from the undersigned, must be delivered not later than 28th May, 1947.

Canvassing, either directly or indirectly, will disqualify.

R. H. WRIGHT, Town Clerk

Council Offices, Surbiton.

Council Offices, Surbiton.

COUNTY BOROUGH OF NORTHAMPTON.
ASSISTANT ARCHITECT.
Applications are invited for the appointment of an Assistant Architect (Town Planning), on the permanent staff of the Borough Architect and Town Planning Officer, in A.P.T. Division, Grade V (£460-£510 p.a., plus bonus).
Applicants should be Members of the Royal Institute of British Architects, and have experience in Town Planning. Duties will consist mainly of the preparation of re-development schemes for the Central Area, Civic Centre, etc. as part of the Town Planning Scheme, and at a later stage the architectural work in consection therewith. Previous experience with a Local Authority is not essential.
Further particulars of the appointment and ofform of application may be obtained from the undersigned, to whom completed forms should be returned by Friday, 30th May, 1947.

C. E. VIVIAN ROWE,
Town Clerk.

Guildhall, Northampton. 1st May, 1947.

Ist May, 1947.

SLOUGH ESTATES, LTD., require a CHIEF SURVEYOR. A house at Slough (with garage) is included in the emoluments.

Applicant will be responsible—assisted by an adequate staff—for the development of the Company's Estates, involving factory design, land, and building surveying.

Advanced knowledge of modern factory and industrial design and construction, including steel-frame and R/C construction, including steel-frame and R/C construction, including steel-frame and R/C construction, is essential. In addition he must have had some experience is supervising the preparation of Building Quantices and preparing approximate estimates of cost of building work.

A qualification in Architecture is desirable. He must also have had such experience as will enable him to direct theodolite levelling and making surveys, and to supervise the construction and maintenance of buildings, railways and sidings, roads, sewers and similar services.

Age: 35-45 years.

Duties to commence on 1st August, 1947.

Applicante should send full details of experience, qualifications, and salary, to Meesrs. Welck & Lander, FF.R.I.B.A., 38, Gloucester Place, Portman Square, W.1, on or before 22nd May, 1947.

LONDON COUNTY COUNCIL.

ARCHITECTURAL ASSISTANTS.
Applications are invited for positions of Architectural Assistants, in the Housing and Valuation Department, at consolidated salaries of up to 250 a year. Commencing salaries will be determined according to qualifications and experience, and qualified candidates will be eligible for appointment to the permanent staff of the department on the occurrence of vacancies. Engagement will involve contribution to the Council's Superannuation and Provident Fund.
Successful candidates will be required to undertake work in connection with the design and development of housing schemes (cottages and multi-storey flats).
Forms of application may be obtained from the Director of Housing and Valuer, The County Hall, Westminster Bridge, S.E.I. (stamped addressed foolscap envelope required).
Canvassing disqualifies. (1050) 741

CITY OF OXFORD EDUCATION COMMITTEE. SCHOOLS OF TECHNOLOGY, ART AND COMMERCE. SCHOOL OF ARCHITECTURE AND BUILDING.

Applications are invited for the post of Fultime INSTRUCTOR AND LECTURER in Building Construction. Applicants must be suitably qualified in Architecture, Building or Civil Engineering. Special experience and knowledge of Science applied to Building will be an additional qualification. The post is newly created to meet expansion, and is permanent, dating from September, 1947. Salary in accordance with the Burnham (Technical) Report, 1945.

Forms of application and further particulars may be obtained on receipt of a stamped addressed envelope from the Chief Education Officer, 77, George Street, Oxford, to whom completed forms must be returned as soon as possible, and in any case not later than a fortnight from the date of the appearance of this advertisement.

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THE UNIVERSITIES BUREAU OF THE BRITISH EMPIRE, 8, PARK STREET, LONDON, W.1, has been requested to announce the following

has been requested to announce the following vacancy:

THE UNIVERSITY OF SYDNEY OHAIR

OF ARCHITECTURE.

The Senate will shortly proceed to the appointment to the Chair of Architecture which will become vacant upon the retirement of Professor L. Wilkinson. It will be glad to hear before Jist July, 1947, from anyone who would like to be considered for the appointment. The salary is £1,250 per annum, but negotiations for a general increase in University salaries are in progress. There is a retirement provision on the lines of F.S.S.U., and in addition the University pays £400 by way of annuity. One year's leave is granted on full pay every seven years, or thereabouts. Travelling expenses will be paid as arranged at time of appointment. Applications are to be sent direct to:

G. DALE,

Acting Registrar.

The University of Sydney. 30th April, 1947.

OUNTY BOROUGH OF SOUTH SHIELDS.
APPOINTMENT OF TECHNICAL ASSISTANT (FERMANENT).
Applications are invited for the following permanent appointment on the staff of the Borough Engineer (Lt.-Col. John Reid, O.B.E., M.Inst.C.E.) from persons having suitable qualifications, for First Assistant Architect, A.P.T., Grade V. Salary, 2460 to 2510 per annum, plus war bonus, at present £59 16s.
The appointment will be subject to the provisions of the Local Government Superannuation Act (1937), and the successful candidate will be required to pass a medical examination.
Form of application may be obtained from the Borough Engineer's Department, Town Hall, South Shields, and should be returned completed not later than 21st May, 1947.
Canvassing, either directly or indirectly, will disqualify.

JOHN REID,

JOHN REID,
Borough Engineer's Office, Town Hall,
2nd May, 1947.

Amended

Amended Advertisement.

BOROUGH OF HARWICH.

SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited to fill the above-mentioned appointment, in the Department of the Borough Architect and Planning Officer, at a salary of £360 per annum, rising by annual increments of £15 to £465 per annum, plus cost-of-living bonus, at present £59 16s. per annum. HOUSING ACCOMMODATION WILL BE FOUND. IN THE NEAR FUTURE, BY THE BOROUGH COUNCIL FOR THE SUCCESSFUL APPLICANT.

Further particulars and forms of applications.

APPLICANT.
Further particulars and forms of application
will be supplied on request, and applications
should be addressed to the undersigned in an
envelope endorsed "Senior Architectural Assistant" be

ant."
Closing date for applications is 28th May, 1947.
Dated this 9th day of May, 1947.
G. F. CONGDON,
Town Clerk.
913

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

ARCHITECTURAL ASSISTANTS.

Applications are invited for the following appointments:—

ARCHITECTURAL ASSISTANT, at a salary according to Grade VI of the A.P.T. Division of the National Scale of Salaries, viz., £535 £20 and £25—£600 per annum, plus bonus, with experience in the proparation of Drawings. Specifications and Estimates in connection with Building and Architectural Work usually undertaken by a Local Authority, and in the organisation of housing construction on a large scale.

ARCHITECTURAL ASSISTANT, at a salary according to Grade IV of the A.P.T. Division of the National Scale of Salaries, viz., £420×£15—£465 per annum, plus bonus, with experience in the preparation of Drawings, Specifications and Estimates for Building and Architectural Work. Bonus for each appointment at present amounts to £59 6s. per annum. Applicants for the firstnamed appointment should be Associates of the Royal Institute of British Architects, and for the second appointment should have passed some part of the examination qualifying for A.R.I.B.A. The Council will consider the provision of housing accommodation for the successful candidates.

housing candidates

The appointments are subject to the provisions of the Local Government Superannuation Act. 1937, and the successful candidates will be required to pass medical examinations.

Canvassing, directly or indirectly, will disqualify, and candidates should disclose relationable (in any to any Member or Senior Officer of the Council.

Applications, stating age, qualifications and experience, with copies of not more than three testimonials, endorsed "Architectural Assistant IV," as the case may be, should reach the undersigned not later than the first post on Friday, 30th May, 1947.

A. E. POOLE,

A. E. POOLE,
Clerk of the Council.
9th May, 1947.

935

MANCHESTER MUNICIPAL COLLEGE OF TECHNOLOGY IN THE UNIVERSITY OF MANCHESTER). APPOINTMENT OF ASSISTANT LECTURER IN BUILDING.

The Government Body invites applications for an Assistant Lectureship in Building, with the title and status of Assistant Lecturer in the University of Manchester. Candidates should be Associates of the Royal Institute of British Architects, with good professional experience. Salary scale: 2420 per annum, rising by annual increments of £20 to £500 per annum. Commencing, scaler: 9420 per annum, and form of application may be obtained from The Registrar, College of Technology, Manchester, 1. The last day for the receipt of applications is Monday, 2nd June, 1947.

Canvassing, either directly or indirectly, will disqualify a candidate for appointment.

J. E. MYERS,

Principal of the College.

WESTMORLAND COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments:—
(a) SENIOR ASSISTANT ARCHITECT (Grade VI). Salary, £535-£600.
Preference will be given to Associates R.I.B.A., with good experience of modern School, Police and/or Public Health work, and the organisation and supervision of large building contracts.
(b) ASSISTANT ARCHITECT (Grade III). Salary, £390-£435.

(b) ASSISTANT ARCHITECT (Graue III).
Salary, 2390-2435.
Candidates should preferably, but not essentially, have passed the R.I.B.A. Intermediate Examination, must have had general drawing office experience, and possess a sound practical knowledge of building adaptation and mainten-

ance work.

(c) ARCHITECTURAL ASSISTANT (Grade I).

Salary. 2350-2375.

Candidates should be good draughtsmen, have had some previous drawing office experience, and a sound knowledge of modern building construction. Some surveying experience would be beautiful.

helpful.

A cost-of-living bonus (at present £59 16s.) will be payable in addition to the salaries given

The appointments will be on the permanent staff of the County Council (terminable by one month's notice on either side), and subject to superannuation and successful medical examination.

tion.

Applications, clearly endorsed with the post applied for, and giving particulars as to age, education, etc., qualifications and experience (and/or war service), and accompanied by copies of two recent testimonials, must be received by B. H. Crompton, A.B.I.B.A., A.M.T.P.I., County Architect, County Hall, Kendal, not later than Saturday, 7th June, 1947.

Clerk of the County Council.

County Hall, Kendal.

xlix

LONDON COUNTY COUNCIL.

Required, at the Hammersmith School of Building and Arts and Crafts, Lime Grove, Shepherd's Bush, W.12, in the senior building school, a Fulltime LECTURER IN BUILDING CONSTRUCTION AND BUILDERS' QUANTITIES. Ability to assist with the teaching of structural work would be an additional qualification. The commencing salary is £300 p.a., plus a London allowance of £36 or £48, according to age or teaching experience. An addition of £15 a year is allowed for each year of approved industrial experience up to a maximum of ten years, together with an increment for each year of previous full-time teaching service. The maximum of the scale is £525, plus the London allowance. Application form (stamped addressed foolscap envelope necessary from the Principal at the School), to be returned by 12th June, 1947. (1518)

SCHOOLS OF TECHNOLOGY, ART AND COMMERCE.

SCHOOLS OF TECHNOLOGY, ART AND BUILDING.

Applications are invited for the post of Full-time INSTRUCTOR AND LECTURER in Building Science and Technology. Applicants must be suitably qualified in Architecture, Building Science and Technology. Applicants must be an additional qualification. The post is permanent, dating from September, 1947. Salary in accordance with the Burnham (Technical) Report, 1945.

Forms of application and further particulars may be obtained on receipt of a stamped addressed envelope from the Chief Education.

Forms of application and further particulars may be obtained on receipt of a stamped addressed envelope from the Chief Education Officer, City Education Officer, City Education Officer, Ti, George Street, Oxford, to whom completed forms must be returned as soon as possible, and in any case not later than a fortnight from the date of the appearance of this advertisement.

Partnerships

Six lines or under, 10s.; each additional line, 1s. 6d.

PARTNERSHIP.—Old-established firm of Architects, in large rural practice, offers post to young qualified Architect, with view to Partnership; sound prospects for energetic man; references required. Box 898.

ARCHITECT, F.R.I.B.A., age 45, R.A. exhibitor, own connection, wishes to acquire interest in busy practice; Southern or Western Rngland preferred; housing, schools, etc.; first-class references given. Box 937.

Architectural Appointments Vacant Pour lines or under, Es.; each additional line, 1s. 6d.

REQUIRED, for New Factory Buildings, Quantity Surveying, and the necessary Civil Engineering work, a fully experienced SURVEYOR AND BUILDING DRAUGHTSMAN; capable of making the necessary drawings and specifications; the factory is in the South Wales area, and accommodation is available for a single man; duration of appointment approximately two years. Applications, giving full details of training and experience, stating salary required and when available, should be made in the first instance to Box 861.

RCHITECTURAL ASSISTANT required immediately in busy London office. Working drawings, details, surveys, specifications and supervision of work. State age, qualifications, experience and salary required to Box 354.

A RCHITECTURAL ASSISTANT required in general practice in Somerset; R.I.B.A. Intermediate standard; good draughtsmanship and experience essential; excellent prospects; salary by arrangement. Box 869.

SENIOR ARCHITECTURAL ASSISTANT required, having sound general office experience, and complete knowledge of engineering services, building construction, supervision, etc., on large scale high-class work. Reply, stating age, qualifications, experience, and salary required, to Herbert J. Rowse, F.R.I.B.A., Martins Bank Building, Liverpool, 2.

TWO ARCHITECTURAL ASSISTANTS wanted in Cambridge office; salary according to ability, up to £400 per annum. Full details to D. C. Denton-Smith, L.R.I.B.A., 40, Regent Street, Cambridge.

THE following ASSISTANTS required for London Architect's office:—Junior Architectural Assistant; inter. standard; salary offered, 2250 p.a. Surveyor's Assistant, for schedules of dilapidations and compensation claims; salary offered, 2400 p.a. Write, giving full details, to Atherton & Brenchley, 36, Paddington Street, Baker Street, W.1.

Baker Street, W.1.

ENIOR ASSISTANTS required, with experiperionce in industrial work, licensed
premises or housing; salary £450-£625, according
to qualifications and experience. J. G. L.
Poulson, Chartered Architect and Surveyor, 29,
Ropergate, Pontefract.

A RCHITECTS, Piccadilly, have vacancies for one or two capable ASSISTANTS. Ring REGent 7461 for appointment. 933

JUNIOR SURVEYOR, of good education, required to prepare War Damage Repair Specifications, and to supervise building maintenance work in the London area; knowledge of draughtamanship, building materials and office routine desirable. Send particulars of age, experience, salary required, to Box 914.

CAPABLE ASSISTANT required by Architects with general practice in Romford. Write, stating age, experience, and salary required, to Box 923.

A RCHITECTURAL ASSISTANT (Senior) required immediately; salary, £500 per annum. Write, stating age, training, and experience, and when available, to the Surveyer, London Hospital, E.1.

QUALIFIED ARCHITECT required as Managing Assistant for extensive progressive practice, mainly concerned with housing; knowledge of quantities useful; must have up-to-date experience and knowledge of present building regulations; car owner/driver. Send full details, including salary required, to Box 934.

A RCHITECTURAL ASSISTANT required to prepare layout and working drawings for new factories and extension on an industrial estate which is being developed on modern lines in South Essex; previous experience of industrial work is an advantage, but quality of draughtsmanship and knowledge of construction are first essentials; age and full particulars of experience should be stated; assistance would be given in obtaining a house. Write Personnel Manager, Samuel Williams & Sons, Dagenham Dock, Essex.

Estimating and Costing Surveyor or Engineer required by old-established civil engineering and building contractors in Essex engaged mainly on factory construction and extensions; considerable experience of estimating and costing in a contractor's head office is essential, but management of contracts is not one of the duties; salary about £800 per annum, depending on experience and ability; applicants should give details of their age, education, qualifications, and experience with dates. A house may be available if required. Write Box 1689, c/o Charles Barker & Sons, Ltd., 31, Budge Row, London, E.C.4.

Architectural Appointments Wanted

GROUP of experienced Architectural Assistants of offer their spare-time services in all types of Architectural and Engineering projects, survey, specifications, models, etc. 40, Pilet Lane East, Roby, near Liverpool.

A. R.I.B.A. requires spare-time work; London or N.W. Kent area. Box 311.

RCHITECT'S ASSISTANT (31), 6 years' experience, requires position; Cheshire, Lancashire or N.W. England; studying R.I.B.A. final; salary 2420. Box 517.

A SSISTANT (21 years), wide experience, seeks three days' work per week in Essex or Suffolk; own car; salary, or fees by arrangement. Box 316.

QUALIFIED ARCHITECT offers part-time assistance in London; site reports and preparation of working drawings and specifications; general experience; own car. Box 319.

S ENIOR ARCHITECTURAL ASSISTANT (30), qualified, requires position; consider any area; experienced in private practice work. H. Sharp, 58, Charlwood Road, Putney, 8.W.15. 320

PROBATIONER, R.I.B.A., school certificate, with 16 months' experience, aged 17 years 6 months, desires change, preferably Architect's office in City, West End or South London area. Write Box 318.

Other Appointments Wanted

Four lines or under, 2s. 6d.; each additional line,

A RCHITECT (21 years), wide experience all branches, seeks free lance or part time work in Essex or Suffolk; own car; fees by agreement. Box 867.

A RCHITECT offers assistance to Architects by undertaking Surveys anywhere in Greater London area. Box 897.

YOUNG Lady Interior Designer and Mural Artist desires progressive position; available now. Box 936.

Other Appointments Vacant

R.BG

applyin Dublin

THI S Manufacture Bu address House,

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Four lines or under, 5s.; each additional lim,

BUILDING WORKS FOREMAN required to superintend the re-building of houses on at Estate in South-East London; must be able to take off own quantities and control all trades; salary, £450 per annum, including cost-of-living bonus. Apply in writing, giving full particular of age, experience, and any technical qualifications held, to Progress Estates, Ltd., 113, Pows Street, Woolwich, S.E.18. Endorse envelope "Building Works Foreman."

For Sale

Four lines or under, 5s.; each additional line, 1s. 6d.

HOR SALE.—Three screw. 14 in., Stanky "Engineer" Dumpy Level, with quick setting arrangement; 2 diaphragms, mahogany case and tripod; in new condition; seen King's Lynn; what offers. Box 896.

S HOP-SOILED "Terrazo" Fire Surrounds and Hearths; 30s. each; outside measurements 35 in. by 312 in., inside 24 in. by 164 in.; hearths; 312 in.; depth, 16 in. Box 196B, Strand House, Portugal Street, London, W.C.2.

Miscellaneous

Four lines or under, 5s.; each additional line.

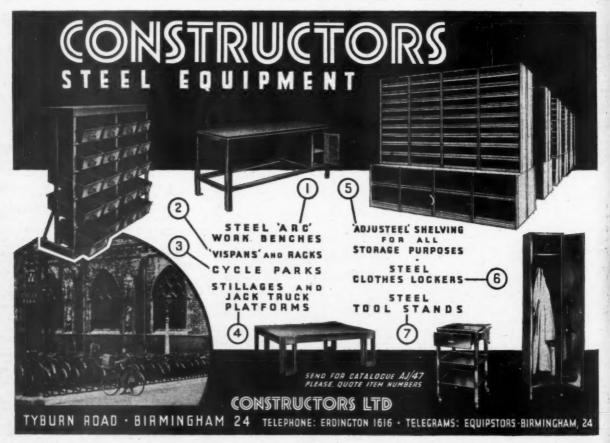
1s. 6d.

WANTED.—One set of "Arts Et Matien
Graphiques." Please reply to Box. 5.
"CAN I HELP YOU!" I have en my sid.
CArchitectural and Civil Engineering
Draughtamen, Building, Estimating, Land, Measuring and Quantity Surveyors. Write C. F. Rumble,
29/31. Whitehall. S.W.1. Tel.: Whitehall cold.

WANTED.—Complete set of "Typography."
Box 487.

TYPING AND DUPLICATING.—Orden executed promptly by fully experienced staff; Bills of Quantities, Specifications and Articles of Agreement a speciality and guaranteed. Write B.M.T. & Co., 1a, Churchyard, Hitchin, Herts.

"UNIT SYSTEM" changeable letters, signs and directory boards, now available at Changeable Sign Co, Ltd., 182a, Shirland Road, W.9. Tel.: Ladbroke 1033.



R MGULAR supplies of the American "Architectural Forum" can be had by applying to me, Joseph Murphy, 4, Clare Street, publis. 792

Dublin. 792

THE Commonwealth Experimental Building
Station, Australia, would be glad to receive
Manufacturer's Trade Catalogues and Literature
on Building Materials, etc., which should be
addressed to the above, at Room 608, Australia
Henre, Strand, W.C.2.

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siddressed to the above, at Room 508, Australia House, Strand, W.C.2.

884
GOLDERSTAT PHOTOCOPIES.—The perfect reproduction from blueprints, drawings, silustrations, photographs, etc.; quick, inexpensive, Golders Trading Co., 54, Golders Gardens, London, N.W.11.

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884
SERVICE STUDENT urgently requires a "Elements of Quantity Surveying." by Willis. Price and particulars to Box 895.

885
FENCING FOR ALL PURPOSES.—Supplied and erected; established 100 years. Parker, winder & Achurch, Ltd., 20, Broad Street, Birmingham, 1.

MODELS and Dioramas expertly executed; Architectural Town Planning, Exhibitions, etc.; estimates on request. Randall-Page, 11s, Royal Terrace, Southend-on-Sea, Essex.

852
BHOTOGRAPHIC reproduction to any size;

Boyal Terrace, Southend-on-Sea, Essex. 652

PhOTOGRAPHIC reproduction to any size;
Photostat and Micro-filming; expert staff and special equipment provide a high speed service at S. P. Hamill, Ltd., 7/8, Lansdowne Place, Cheltenham. Tel.: Cheltenham 4040. 736

A. J. BINNS, LTD. Specialists in the supply and fixing of all types of fencing, guard mil factory partitions and gates. Harvest Works, 9-107, 8t. Pauls Road. N.I. Canonbury 2061.

HRATH TYPING SERVICE, 157, Malden Road, N.W.5; specifications and memos. a speciality; standard rates. Tel.: GULliver 3241.

QUANTITY SURVEYORS have office accommodation available in North London; suitable for Architect with small practice wishing to collaborate. Box 911.

WANTED.—Set of "Architects' Journal"
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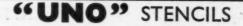
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