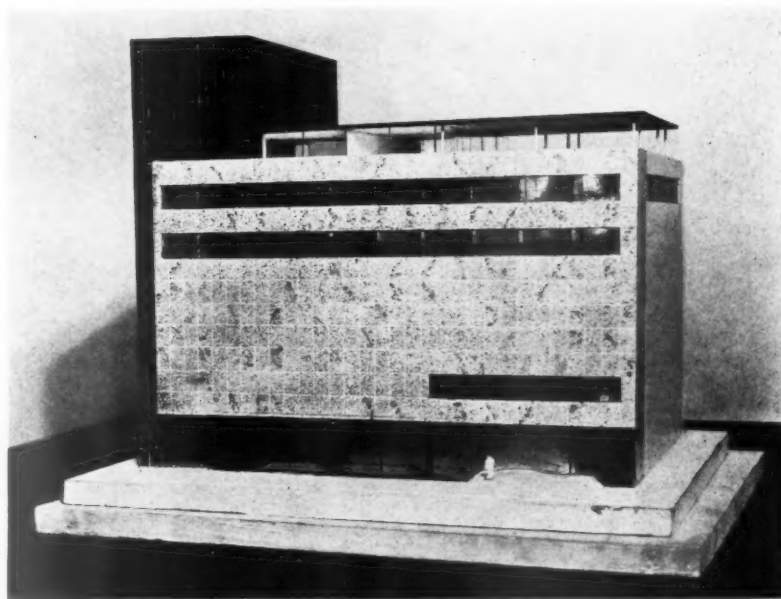


MUSEUM OF MODERN ART
NOW UNDER CONSTRUCTION IN NEW YORK



A MODEL of the new Museum of Modern Art on West 53rd Street, New York, which is scheduled to be completed in the autumn of 1938. The illustration shows the 53rd Street frontage, which is faced with white marble; the tower on the left is in dark stone. The rear (54th Street) elevation is formed of a combination of glass bricks and clear plate glass. This frontage is used as a garden for the exhibition of sculpture and for other museum purposes. The basement contains a lecture room with seating for more than 500 persons; the fourth and fifth floors house the libraries and offices, and the intermediate floors, including ground floor, are used for exhibition purposes. The architects of the building are Philip L. Goodwin and Edward D. Stone.



THE TEXAS CENTENNIAL EXHIBITION

At a time when the Paris Exhibition is a subject of such widespread discussion it is interesting to see a contemporary Exhibition in the United States. These photographs illustrate the Centennial Exhibition at Dallas, Texas. Above is a general view of the Main Court; in the distance is the Permanent Gallery of Fine Arts; the other buildings are temporary in construction. Left: a view of a section of the Livestock Pavilion.



WHAT CHESHIRE THINKS

AUGUST this year has had its newspapers enlivened by an attack on the British exhibits at Paris. The sensitive affair of the design of a national display at an international exhibition was soon broadened into more exciting accusations of complete upper middle-class bias; and the JOURNAL sympathized to some extent with the average British citizen who felt out of it in the British Pavilion.

But only, alas, to some extent. The JOURNAL could not avoid suspecting that a good deal of the ordinary man's indignation came from the absence of the really bad, of all the machine-made antique in surroundings that has been imposed upon him till he looks for it and even likes it. And we were grateful to the Council for Art and Industry, and even to the upper middle class, for continuing to believe that Britain had not lost all powers of design.

The JOURNAL, after only one week, stands rebuked, and must now confine its tribute to the Council for Art and Industry. Last week it forgot that though there may be 17 University men in the Cabinet, on the things that matter in Britain all classes stand shoulder to shoulder.

The average Briton at Paris did not state very clearly what he did not like—but on July 28 Cheshire had said it all for him in words after his own heart.

Arthur Ronald Nall Nall-Cain, 2nd Baron Brocket, educated at Eton and Magdalen, Barrister, golfing Blue, ex-M.P., director of companies, and Chairman of the Hertfordshire Branch of the C.P.R.E., opened on that day the Dee Hotel, West Kirby, Cheshire, after complete reconstruction.* There is no nonsense about Lord Brocket; he is young, only 33, but this fuss at Paris about design cuts no ice with him. He has progressive ideas of the responsibility of a brewery company to the public. He knows what he thinks about art, and as chairman of the company he sees to it that his fellow-countrymen can benefit by the taste of Eton and Oxford.

The reporter of the *Hoylake and West Kirby Advertiser* has fortunately extended Lord Brocket's audience:

As chairman of the company, Lord Brocket said, that was a time when he ought to make one or two remarks about the sort of building they had put up . . . It was very easy to criticise a brewery company for something that existed for the making of profits and the selling of beer. He thought he had sufficiently wide interests to be able to tell them, impartially, that although the company existed in order not to make losses yet it did take a great pride in its properties. . . .

When, a year or two ago, it purchased the Dee Hotel, it struck them—and particularly himself, who had known the district for many years—that if they were allowed by the Licensing Bench

to build a nice hotel in good style, it would be a credit to West Kirby. . . .

The architect, Mr. Rigby, was an old friend of the firm, and had been with them for a good many years. It was interesting to know that it was not necessary for them to go outside the firm for an architect.

Continuing, Lord Brocket said the policy of Peter Walker and Company was to put up buildings (so long as they could afford them) which were a credit to the district and to the licensing magistrates who had allowed plans to be passed. One did, of course, run up against some extraordinary benches of magistrates, who, because there was an extra square yard of drinking space, would turn a plan down. Happily that was not so in this case. He thought the brewery business had reached the stage where it did not exist entirely for profit and in order to enable people to drink its beer, but because it was a progressive type of business, and took a pride in its properties. Of the properties put up by that company, he thought the Dee Hotel would not be the least admired. That was the first time they had had an "opening" of a house in the Wirral area.

Far from apologising for what was sometimes alluded to as "Brewer's Tudor," and discussing the architecture of the Dee Hotel, Lord Brocket (who is chairman of the Society for the Preservation of Rural England)†, said he was proud of the Tudor design, which, he thought, was far better than the modern cubist designs. If you had a good design, Tudor or Georgian, why not copy it, instead of trying to invent some horrible 1937 design? On his persuasion they had copied the Tudor architecture and tried to model a hotel somewhat on the form of the old Dee, and he was very glad they did that. He believed that people in the future would praise them for doing that, instead of adopting some contemporary design which happened to be the design for 1937.

Lord Brocket is one of those who (in Professor Hilton's words at the Liberal Summer School) occupy the reserved stalls of life, in which it is supposed to be so difficult for others to gain a seat. Of the highest education, great experience and holding many important appointments, he has had the freedom of movement and choice which, allied to intelligence and interest, play a great part in determining good standards of taste. To him and those like him who are not compelled to buy the cheapest or something very near it, the country has been accustomed to look for some help in developing the best tendencies in national design.

As a J.P., County Councillor and officer of the C.P.R.E., Lord Brocket has accepted his duties. Of the arts of architecture and design he has no doubt thought equally seriously, he has made up his mind what England wants in its buildings and exerted his influence to bring it about. A fuss at Paris does not matter very much as long as Britain knows its mind. And in Britain Lord Brocket and the plain men who are altering the appearance of the landscape so surprisingly quickly know exactly what they like.

* Illustrated on page 285.

† A local chairman.—Ed. A.J.



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

PHYSICAL FITNESS

THE National Advisory Council and the Grants Committee for Physical Training and Recreation have issued a little book called "National Fitness: the First Steps."

The council has only been in existence for a very little while—and therefore its first suggestions may, and probably will be, amplified later. For the moment, however, the average man is apt to see a sharp distinction between the title of the booklet and the title of the body issuing it.

Physical fitness is not the product of physical training and recreation alone. The N.A.C.P.T.R. see this, but manages to get over it in the first four lines and does not again refer to so ticklish a question.

The rest of the booklet concerns ways and means of encouraging physical training and games throughout the country.

The R.I.B.A. is thinking of a Health Exhibition itself, and one hopes that in *its* lead it will not be forgotten that most of those who can anyway afford exercise are doing a great deal for themselves already.

To raise general standards of fitness what are wanted are: better and quicker medical services and sick relief; propaganda and instruction centres to encourage the best choice and preparation of food; and closely spaced recreation grounds for babies and young people *under supervision*. We do need hundreds more playing grounds—but they are not the least use if a parent has to remain in them while the children play.

Some money might be well spared from gymnasias and cricket fields to supply this far more urgent need.

THE SEARCH FOR QUIET—CAMBRIDGE . . .

Cambridge wants to close some of its streets to heavy traffic during the night and so add one more to the list of small measures which it has taken to defend itself against the motor.

Everyone has heard about what has happened to Oxford in the motor age, but I had imagined that the Cambridge colleges and market place area had better protection. I go there a lot, and the unvarying sight of Bridge Street, Trinity Street, Market Street and Petty Cury filled from end to end with motionless vehicles was very reassuring; smell there might be, and certainly some noise, but streets designed for the pack-horse rather than modern affairs like wheeled vehicles seemed to have their own way of stopping progress.

I had forgotten the night-time. Caius, St. John's, Trinity, Magdalene and Corpus Christi have all been damaged by traffic vibration—particularly by heavy vehicles in comparatively empty streets.

With the Backs and the roads to the east of Parker's Piece providing excellent ring-roads, the vibration can and should be stopped; but the Master of Magdalene's second complaint is not so likely to raise sympathy. Undergraduates cannot sleep at night for traffic noises.

This is very sad but is doubtful whether it is more regrettable than the noise and nuisance caused in Cambridge by undergraduates' cars. When the Senate bans cars absolutely for undergraduates (who only spend 6½ months a year in Cambridge anyway), it will have the ear of the public about traffic noise. But not until—or, at least, not mine.

. . . AND LEEDS

For some months the L.M.S. has been rebuilding the Queen's Hotel in Leeds and, by way of giving thanks for the many more visitors who will come and spend their money, the Leeds Corporation is doing its best to make its trams quiet enough for visitors to spend all their time asleep if they want to. And with some success, too, for *The Times* correspondent can detect "no noise unless one is standing close to a moving tramcar."

How is it done? Nobody seems to know, least of all *The Times* correspondent, who murmurs vaguely of "special rails laid on improved foundations." Why must the Press be so maddeningly uninformative as soon as it gets on to something technical? Perhaps Mr. Curtis Green could tell us how the tramways people have done it.

STREET NAMES

The fashion for renaming streets seems to have spread to the countryside; there is, for instance, the case of Under-the-Heavens. Under-the-Heavens may lack conviction as a social entity; admittedly it is in the civil parish of Sarratt, the ecclesiastical parish of Chipperfield, the telephone area of King's Langley, the postal area of Rickmansworth, the rural district of Watford, and the parliamentary division of Hemel Hempstead; but its exact geographical position is made no clearer by its new



On the job: the architect of the new working-class housing estate now being built at Loughborough Park, discussing progress with his assistants and representatives of the builders. From right to left: Messrs. E. W. Armstrong (architect); J. K. Dale—back view (of C. Miskin & Sons, the contractors); hat—J. Ball (general foreman); C. J. Elms (clerk of works); J. W. Rivett (architect's office) and H. J. Hall (architect's office).

designation by the Hertfordshire County Council as "Bottom Lane."

Considered from any angle of folklore, romanticism or efficiency, there does not seem much gained by the change.

WHITEHALL GARDENS AGAIN

Mr. Vincent Harris's luck seems to be in again, for, after changing its mind as often as a client building his first £500 bungalow, the Government has at last decided to start building the new Whitehall offices early next year. H.M.O.W., interviewed last week, said that "the postponement was entirely due to the increased demand for steel and other raw materials owing to rearmament and the strain thrown on the resources of the building industry by the defence works programme." Steel shortage perhaps, but the last half of the sentence is too Delphic by far for me. Does it mean that the building industry cannot get raw materials or that it has got too many aerodromes to be able to take on anything more?

The whole scheme isn't to be completed until 1947, so there's plenty of time for a succession of Governments to have a whole series of new ideas. It is a good thing that Mr. Vincent Harris was the youngest of the suggested architects.

SOCIETY NOTES

Urban, as well as rural, preservation marches on. At present "conspicuous" posters may not be put up within a distance of 40 yards of parks and open spaces. The patient

efforts of the Scapa Society have now been rewarded by the increase of the forbidden distance to 100 yards.

With a sufficiently catholic interpretation of the term "open spaces" the ultimate prohibition of all "conspicuous" posters does not, after all, seem such a remote possibility.

The newly-constituted "Georgian Society" has found an admirable objective for its efforts in the proposed King George V Memorial, or rather in the proposal to demolish the Georgian houses in Abingdon Street to make room for a statue of King George V. As Mr. Douglas Goldring, the Secretary of the Society, has pointed out in successive letters to the Press, the Memorial Committee continue to make ineffective justifications for their action, and the assertion that the houses "have no commendable architectural features" is contradicted by the assurance of the First Commissioner of Works that he will preserve the façades of 6 and 7 Old Palace Yard.

We can only hope that the Society and its sympathisers will succeed in raising an effective body of opposition before the committee seek "Parliamentary approval" for their proposal next session.

ALLEHÖCHSTE BAUMEISTER

The Führer seems to be returning more and more to the job of his youth, for after knocking off some sketches for additions to his Chancellery in Berlin he has now designed the "largest hotel in Europe," which is to be built near Berchtesgaden for visitors of State and for the "wealthier Nazi pilgrims who now flock to Berchtesgaden in large numbers in the hope of catching a glimpse of their Leader."

If there are any German architects who did not quite understand exactly what the recent edicts about the purity of art really meant, this ought to give them as good a tip as anything. German architectural periodicals will be worth watching for the next month or so.

AMENITY'S MARTYR

Please don't send five shillings for the Darwall fund made out (if a cheque) to THE ARCHITECTS' JOURNAL, 9 Queen Anne's Gate, Westminster, London. The Darwall fund is closed. I trust for ever.

Have I enjoyed it as much as you have? Certainly. It is always a pleasure to annoy one's public. My public stretches from Dublin to Dunfermline, Glasgow to Guayaquil, South Shields to Shanghai, Tulse Hill to Zanzibar. . . My pride in categorically stating this is not unmixed with awe. There have been some pleasant letters, too, and some funny protests.

I have disregarded threats that made my blood run cold. My heart has glowed with rare tributes. For two subscribers Mr. Darwall has been the last straw, and for six he has been the symbol of a great cause being at last taken seriously—if only by the law.

The cash goes to Mr. Richard Mansell Darwall today. To lime-burner W. Wallstead a fond—a very fond—adieu.

ASTRAGAL

NEWS

POINTS FROM
THIS ISSUE

- "If you had a good design, Tudor or Georgian, why not copy it, instead of trying to invent some horrible 1937 design?"—Lord Brocket, C.P.R.E. Official, reported in the "West Kirby Advertiser" 281
- Results of the Belfast Waterworks Competition and illustrations of the first and second premiated designs are given on pages 286-289
- Conditions of a Competition for municipal buildings have just been issued 290
- The Report on the Overcrowding Survey is one of the Reports of outstanding social importance dealt with in the Eighteenth Annual Report of the Ministry of Health 303

NEWS FROM RUSSIA

Plans for the building of a student city in Vladivostok have just been completed by the Architectural Bureau of the Commissariat of Education of the RSFSR (Russian Socialist Federal Soviet Republic). The city will be situated on the shores of Amur Bay, four miles from the centre of Vladivostok. The various buildings of the Far Eastern University will be erected in this city, including the buildings for the departments of Eastern Studies, chemistry, physics and mathematics, the departments of biology and geography. A Korean Pedagogical Institute, embodying the departments of history, physics, and mathematics, is also scheduled for construction. More than 3,000 students will live and study in the new city, where dormitories, a club, dining-rooms, baths, and recreational facilities will be provided for them. The construction of apartment houses for the research and technical workers both of the university and the institute is planned in the residential quarter of the city.

A great number of schools have been built in Moscow during the last few years. During the period 1931-1934, 24 new schools were built with accommodation for 18,900 pupils; in 1935, 72 schools were built with accommodation for 65,500 pupils; in 1936, 150 schools with accommodation for 132,000 pupils. This year, 72 new schools are being built. Each of these schools is designed for 880 pupils.

BATH'S BUILDINGS SCHEDULED

Under the Bath Parliamentary Bill, which has just become law, the Corporation is given the control of the materials used for building, just as under a previous

THE
ARCHITECTS'
DIARY

Thursday, August 19

EXHIBITION OF THE WORK OF VAN GOGH. At the Phoenix Gallery. 10 a.m. to 7 p.m. Mondays and Thursdays until 10 p.m. Until August 22.

Thursday, August 26

LONDON SOCIETY. Visit to Modern Churches in the Diocese of London. The coach will leave Lancaster House at 2 p.m., visiting: The John Kettle Church, Mill Hill; St. Mary the Virgin, Kenton; St. Alban's, North Harrow; St. Paul's, Ruslip Manor.

Monday, August 30

LONDON SOCIETY. Visit to Old Walthamstow, including the Church, Grammar School and 16th century Almshouses. Meet at the Parish Church of St. Mary the Virgin. 3 p.m.

Monday-Friday, August 30-September 3

SANITARY INSPECTORS' ASSOCIATION. Jubilee Conference. At Brighton. Monday: Meeting of the Defence League, 10 a.m.; Meeting of the Mutual Provident Society, 11.30 a.m.; Annual General Meeting, 4 p.m.; Reception, 7.30 p.m. Tuesday: Official Welcome of Members and Delegates by the Mayor, Presidential Address by Sir Leonard Hill, and Official Photograph, 10 a.m.; Discussion on "Public Health Act," 2.30 p.m.; Conference Dinner, the Grand Hotel, 7 p.m. Wednesday: Discussions on "Factories Legislation" and "Public Cleansing, with special reference to the Salvage of Waste Products," 10 a.m. Thursday: Discussions on "Meat Inspection with special reference to Memo. 62 (Foods)," and "Milk Supply from the Aspect of the Consumer," 10 a.m.; Discussion on "Housing" (a) Legal Aspect, and (b) Social Aspect, 2.30 p.m. Friday: Discussion on "Grit Emission" and Lecture on "Air Raids Precautions and the Public Health Services," 10 a.m.

Sunday, September 26

BRITISH COMMERCIAL GAS ASSOCIATION. Annual Conference. At Manchester, Sunday: Evening, programme of gas publicity films; Monday: Tour of Blackpool or the Lake District; Evening, reception; Tuesday: Morning, business session, followed by luncheon and afternoon session which includes a visit to Wythenshawe; Evening, dinner; Wednesday: Business session, followed by luncheon; Afternoon, Ship Canal tour or visit to Trafford Park. Until September 29.

measure passed in 1925 they are able to control the elevations.

Bath has also obtained powers to schedule all buildings erected before 1820, if they are of historic or architectural interest.

BENSON AERODROME

Protests against the failure of the Air Ministry to consult the local authorities about plans for the proposed aerodrome at Ewelme and Benson were made at a recent meeting of Oxfordshire County Council.

The town-planning committee reported the receipt of a letter from the district town-planning committee, stating that in connection with the proposed aerodrome no plans had been received of any temporary or permanent building to be erected.

Lord Phillimore said that they had a Government department coming down, buying land, making its own layout, and ruining a lovely bit of country, without a single reference to that council or to any town-planning committee. He said that this was not the first time this particular Ministry had taken a high-handed line, and he hoped the council would "ask the town-planning committee for a strong protest."

Alderman Gale said the Ministry proposed to sterilize 500 acres of the finest wheat land in the county.

Alderman W. Hyde said that the Air Ministry had assured the County Councils Association that it was the practice of the department to consult the highways authority and town-planning committee in all such cases, but again this Government department seemed to be encroaching on the province of the local authority.

The council decided to support the town-planning committee in asking for plans.

LINCOLN'S FIVE-YEAR HOUSING
PLAN AMENDED

More plans designed to mitigate overcrowding were referred to at a recent meeting of Lincoln City Council.

The Housing and Town-planning Committee recommended that the Council's original five-year programme approved on August 1, 1933, which provided for the demolition of 666 unfit houses and the erection of 455 new houses for displaced tenants in the period 1934-38, be amended so as to provide for the demolition of a total of 857 unfit houses and the erection of 698 new houses, these figures to be subject to review when a detailed inspection of the unfit houses is carried out.

The Council's estimate of the number and types of houses required to abate overcrowding is as follows:—

Four four-bedroom houses, 40 five-bedroom houses, 19 six-bedroom houses, six seven-bedroom houses—a total of 69.

£800,000 HOUSING SCHEME FOR
SCOTLAND

Sir David Allan Hay, Commissioner for the Special Areas in Scotland, announces that he has promised further substantial grants to local authorities and other organizations towards the cost of schemes designed to improve public health services and amenities. The new schemes include the formation of a housing association for the building of houses supplementary to, but not in competition with, the building activities of local authorities, the total cost of which is estimated ultimately to be about £800,000. Other schemes are the rehousing of squatters (£8,000), drainage schemes (£9,975), a recreation ground and other amenities (£14,450).

On the new industrial estate at Hillington, near Glasgow, which is being established with the Commissioner's assistance by the Scottish Industrial Estates, Ltd., thirty standard unit factories with a total floor space of 173,200 sq. ft. are in course of construction, as well as fourteen "nest" factories with a floor space of 16,800 sq. ft., giving a total of 190,000 sq. ft. Agreements for renting factories have been completed in thirteen cases, while another seventy proposals are under discussion.

The Commissioner's total commitments to the end of July, 1937, amounted to £2,386,000, involving a total expenditure of about £5,000,000. This last figure does not include the capital brought into the areas by new firms being established on the industrial estate or elsewhere.

HIGH-SPEED BUILDING AT
JOHANNESBURG

High-speed building operations are being carried out at Orlando Native Township, Johannesburg, where nearly 1,000 workmen are erecting brick cottages at the

almost incredible rate of from fifteen to twenty houses a day.

It will cost £400,000 to build here 3,000 houses to replace the hovels in native slum areas.

The bill of quantities for their erection is staggering. Among the items are 30,000,000 bricks, 1,500,000 ft. of galvanized iron, 750,000 screws and washers to hold down the iron on the roofs, 15,000 doors and as many steel windows. The windows will have 200,000 panes and 25 tons of putty will be needed to keep them in place.

The work is going on with amazing rapidity. Already 300 houses are occupied by natives from Prospect Township, which is being demolished, and another 700 houses are nearing completion. The foundations of the first house were laid on March 13. By March, 1938, the 3,000 cottages will have been completed.

PORTABLE SCHOOLS IN SUSSEX

Portable classrooms are to be made at Selsey, Shoreham, West Thorney, and other places in connection with West Sussex County Council's scheme to re-organize schools at an approximate cost of £400,000.

This decision follows the success of an experiment at Sidlesham, near Chichester, to develop the idea of Mr. C. G. Stillman, county architect, of making schools which could be transported for use in all conditions. The original purpose of the experiment was to provide accommodation for children from the distressed areas in such a way that if the school were later to become unnecessary it could be dismantled and re-erected elsewhere.

The experiment consisted in the adoption of a framework of pressed steel section of a kind usually used in the construction of heavy motor vehicles, in conjunction with standard window and other units capable of quick erection, dismantling, and re-erection.

CERTIFIED HOUSES

It is just over six months since the National Housebuilders' Registration Council made public its scheme for the independent certification of houses. The names of 1,068 housebuilders are now on its register.

GLASGOW HOUSING STATISTICS

Figures quoted in the annual abstract of accounts approved by the Housing Committee of the Glasgow Corporation showed that municipal housebuilding in Glasgow during the past eighteen years has involved a capital expenditure of £23,686,713. The houses completed by the Corporation number 43,691, the number by private enterprise 10,235, while 275 have been taken over from the adjacent county authorities. In tackling the huge housing problem the Corporation have demolished 12,777 slum dwellings, and in the new housing scheme laid down 130 miles of roads and sewers, while up to the end of May a further nine miles of roads and sewers were in course of construction.

The capital expenditure on housing for the past year amounted to £1,029,929, to which £31,360 was added in respect of capital repayments by house purchasers, the total showing an increase compared with the previous year of £137,124. In the revenue account the receipts fell short of expenditure by £78,060, which was



The Dee Hotel, West Kirby, Cheshire, designed by Mr. R. Rigby, F.I.A.S., M.I.Struct.E., referred to in this week's leading article.

deftly out of the Burgh Fund. The sum estimated a year ago for this deficiency was £85,370.

ANCIENT BUILDINGS

The annual report of the Society for the Protection of Ancient Buildings mentions the following cases in which the society has been approached by owners, guardians, or those in charge of the repair or alteration of ancient buildings during the year: Altarnun Church, Littlehempston Manor, Moretonhampstead Almshouses, glass in St. Neot's Church, Hatherleigh Church, cottages at Hennock, Spital Almshouses, Taunton, Week St. Mary Church.

Among the cases which have been before the committee during the year to which attention has been drawn were Bridgewater Church, Kilkhampton Church, Launcells Church, Lawhitton Church, old house at Membury, Mullion Church, slum clearance at Newlyn, old house in Kirkham Street, Paignton.

CHANGES OF ADDRESS

Colin R. Crickmay, A.R.I.B.A., and Hugh W. Crickmay, A.R.I.B.A., who have been

practising until recently as Crickmay and Crickmay, at 22 Mackenzie Street, Slough, have taken over the practice of Crickmay and Sons at Weymouth, and are now practising under this name from 50 St. Mary Street, Weymouth. Telephone No.: Weymouth 113.

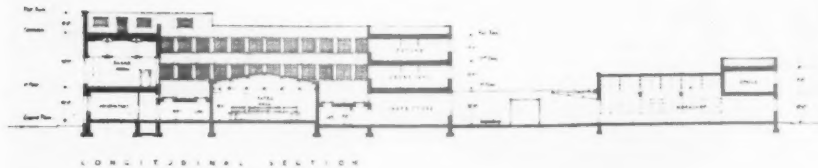
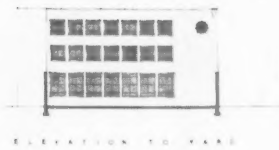
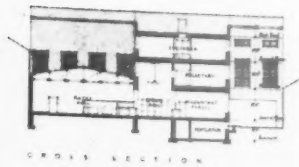
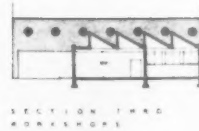
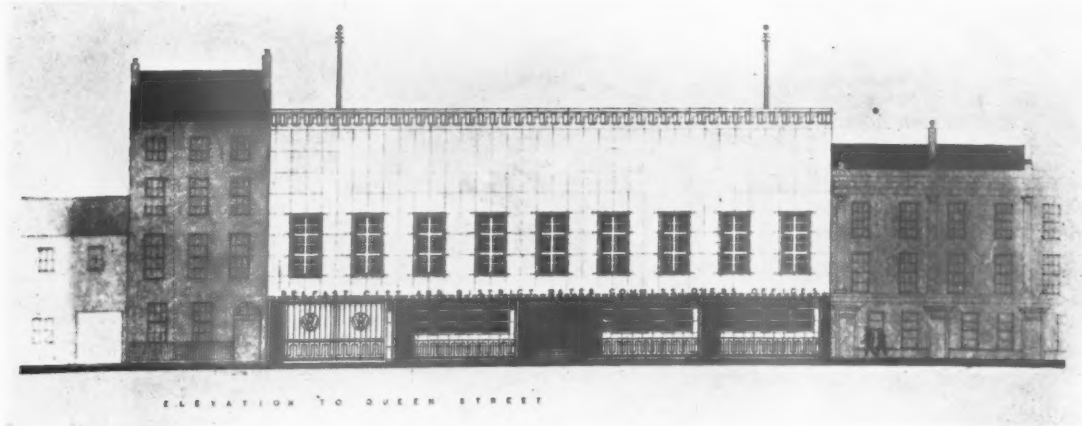
Mr. A. B. Waters, A.R.I.B.A., has removed to "Long Ridge," The Glen, Farnborough Park, Kent. Telephone No.: Farnborough 829.

ANNOUNCEMENTS

Mr. E. F. S. Biram, F.R.I.B.A., of Messrs. Biram and Fletcher, 17 George Street, St. Helens, Lancs, has taken into partnership his chief assistant, Mr. G. E. Salt, A.I.A.A., and Mr. L. B. Fletcher, DIPL.ARCH.A.R.I.B.A., the son of his late partner. The style and address of the firm will remain the same.

Mr. Frank Brown, L.R.I.B.A., 20 Pocklington Walk, Leicester, has taken into partnership Mr. A. L. Sharpe, A.R.I.B.A. The practice is being carried on in the joint names of Frank Brown and A. L. Sharpe, L.&A.R.I.B.A., at Crown Buildings, 4 Loseby Lane, Leicester, to which address all communications should be forwarded. Latest trade catalogues will be acceptable.

COMPETITION FOR OFFICES AND



BY

SILCOCK

AND

THEARLE

Mr. H. Austen Hall, F.R.I.B.A., the assessor of the competition for new offices and workshops, Queen Street, Belfast, for the Belfast and District Water Commissioners, has made his award as follows:—

Design placed first (£300): Messrs. Silcock and Thearle, F.F.R.I.B.A., of 66 Rodney Street, Liverpool.

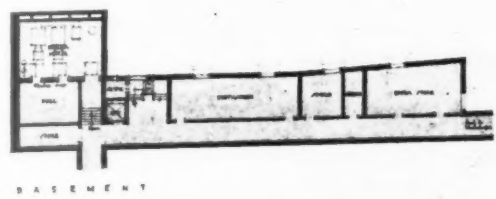
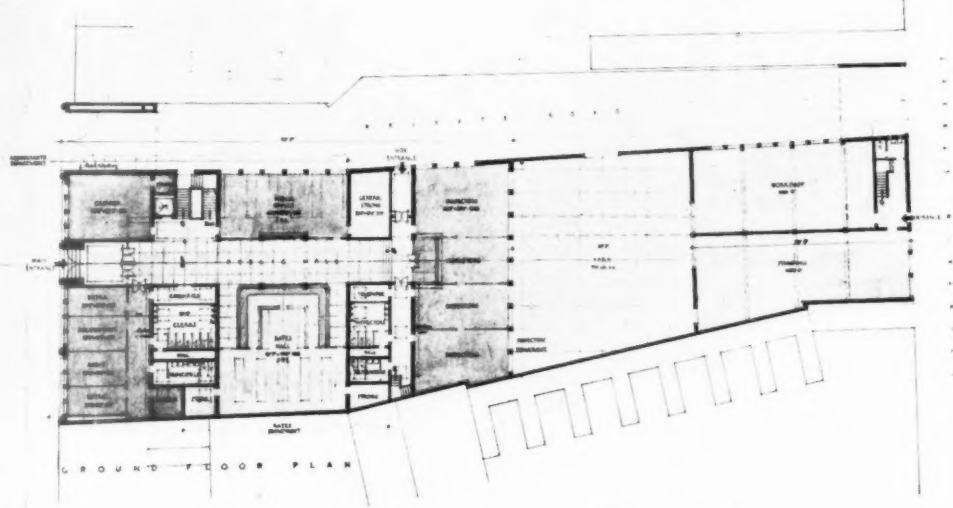
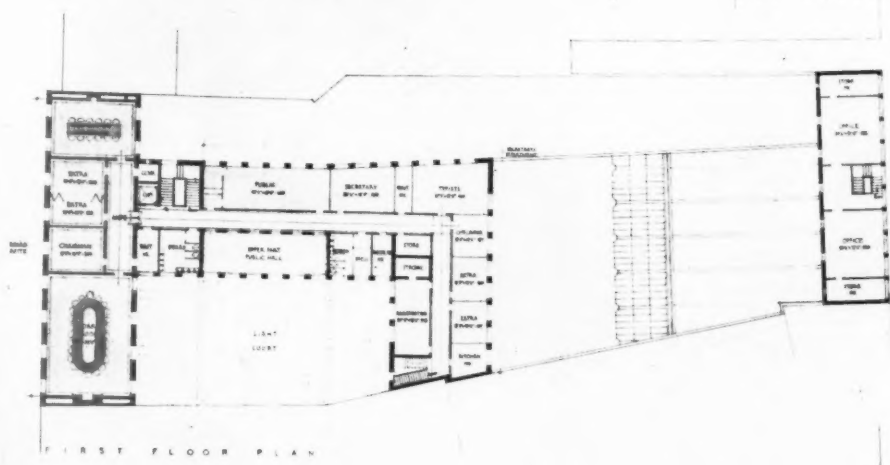
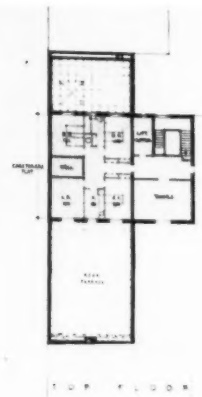
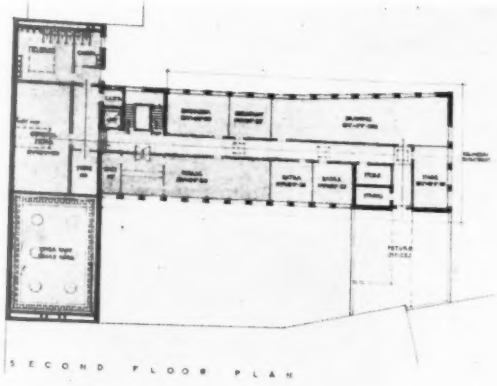
Design placed second (£200): Messrs. E. D. Lyons, L. Israel and C. H. Elsom, A.A.R.I.B.A., of 3 Paul's Bakehouse Court, London, E.C.4.

Design placed third (£100): Mr. H. T. Wright, F.R.I.B.A., of 50 High Street, Newcastle-upon-Tyne.

The designs will remain on exhibition at the Municipal College of Technology, College Square East, Belfast, until August 21, between the hours of 11 a.m. and 4 p.m. (August 21—11 a.m. to 12 noon).

The designs placed first and second are illustrated on this and the three following pages.

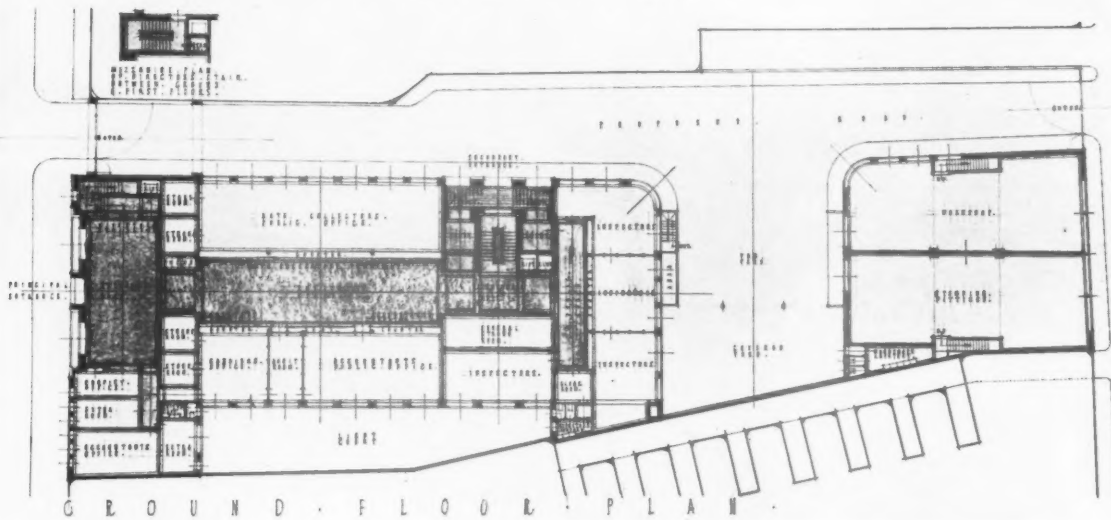
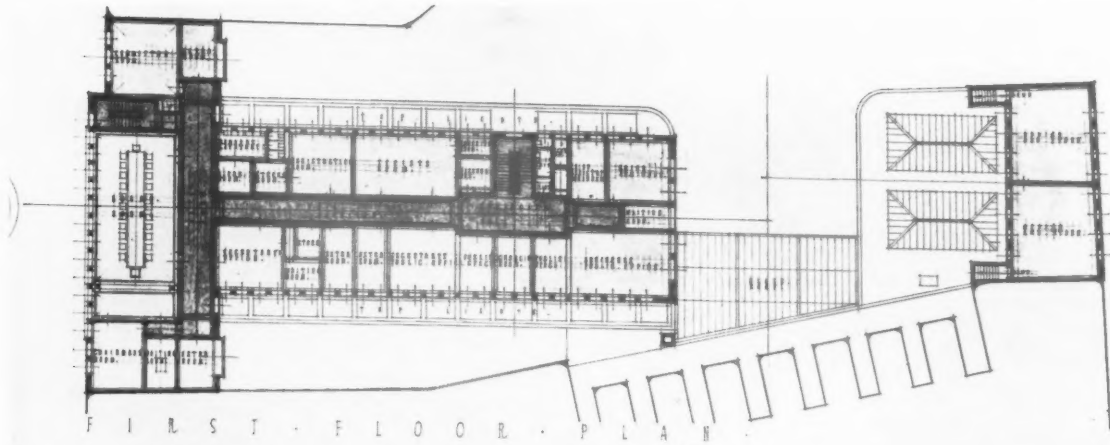
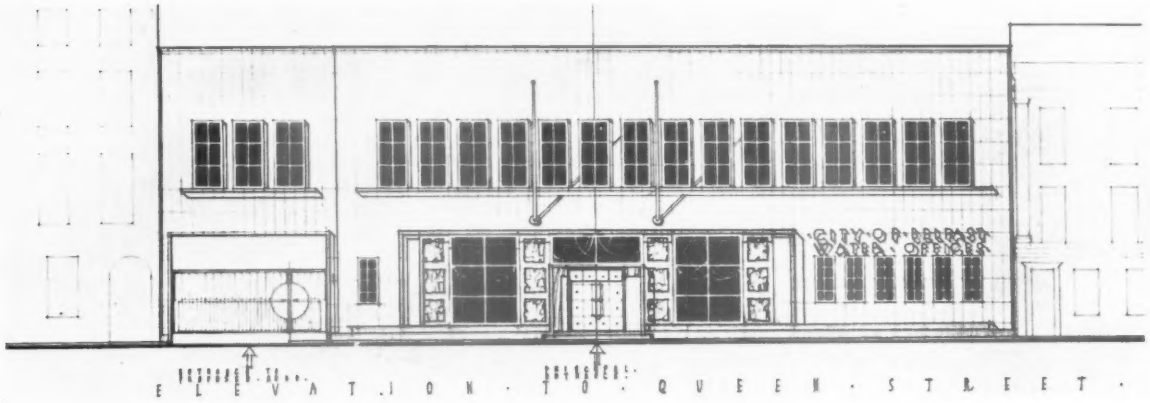
WORKSHOPS, BELFAST: THE WINNING DESIGN



COMPETITION FOR
OFFICES AND WORKSHOPS FOR
BELFAST CITY AND DISTRICT
WATER COMMISSIONERS

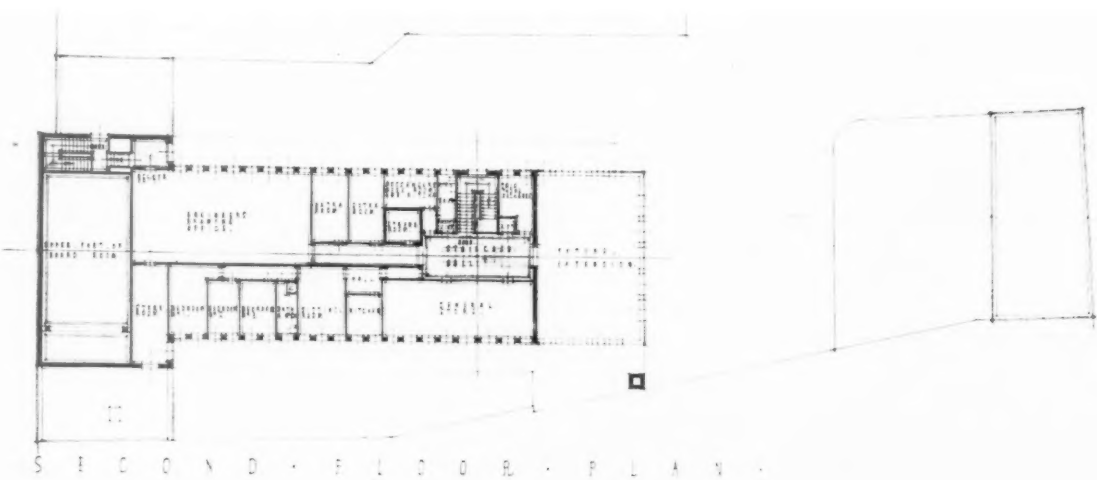
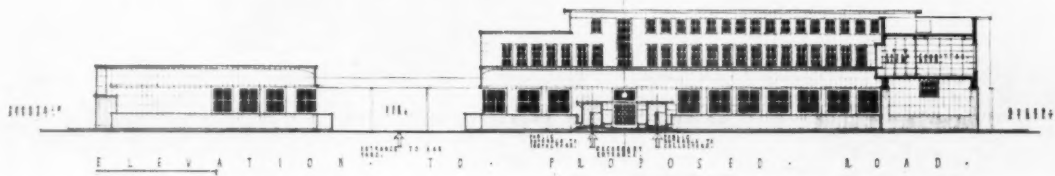
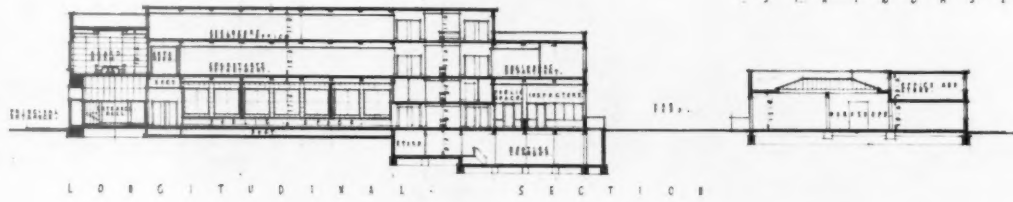
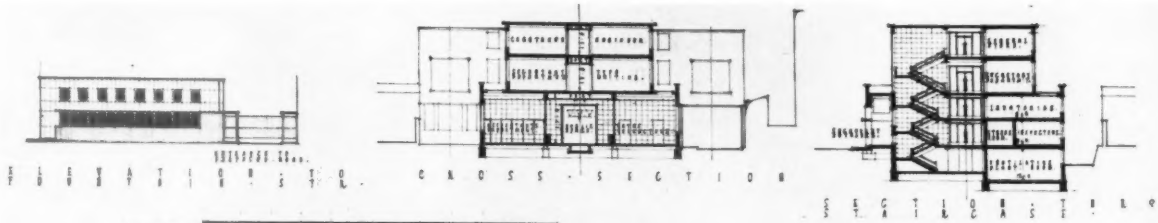
SCALE OF FEET

COMPETITION FOR OFFICES AND



BY E. D. LYONS, L. ISRAEL AND C. H. ELSOM

WORKSHOPS, BELFAST: DESIGN PLACED SECOND



SECOND FLOOR PLAN



BASEMENT PLAN

VERTICAL SECTION

R. I. B. A.



THE EXAMINATIONS

THE FINAL EXAMINATION

The Final Examination qualifying for candidature as Associate R.I.B.A. was held in London and Edinburgh from July 14 to 22, 1937.

Of the 222 candidates examined 103 passed (44 in Part 1 only) and 119 were relegated. The successful candidates are as follows:—

Edward Albarn; Louis Brabazon Baillon; Charles Philip Beauchamp; John Franks Benson; Sidney Blank; Leslie Blease (Part 1 only); Cyril Thomas Boucher; Francis George Broadbent (Part 1 only); Lawrence Arthur Brown; Peter Edward Cooke (Part 1 only); Ian Fortune Calder; Cecil Wallace Coster; Ronald Cowan (Part 1 only); Charles Vincent Crane; John Joseph Cunningham; James Henry Daniell (Part 1 only); Henry Arthur Jack Darlow (Part 1 only); Bernard Harold Dowland (Part 1 only); Miss Beryl Leila Filmer (Part 1 only); David Fletcher; John Pinckston Floyd; Robert Walter Foreman (Part 1 only); Robert Oswald Foster; William Roy Fowler (Part 1 only); Ronald Herbert Franks (Part 1 only); Arthur Frearson (Part 1 only); Arthur Eli Gerrard; Alfred George Goodair; Alan Arthur Haggard; Leonard Holmes Hammond (Part 1 only); James Kennedy Hawkes; George Heslop Hawkins (Part 1 only); George Henry Reginald Heritage (*Mark of Distinction in Thesis*); Edward Charles Hicks; Harold Herbert Hobday (Part 1 only); Arthur Philip Hodgson; Dennis Alexander Hogben; Kenneth le Garge Hoskings (Part 1 only); Derrick Raymond Humphrys (Part 1 only); Ronald Walker Hurst (Part 1 only); Stanley John Herbert Jackson; Ernest Dennis Jordan (Part 1 only); Reginald Cecil Kemp; Thomas Brian Kennedy (Part 1 only); Denis Scott Kilner; Ernest Kinghorn; Eric Alfred Lane (Part 1 only); George Ismay Larkin (Part 1 only); Theodore Paul Le Briéro (*not a British subject*); Robert Kenneth Lewis; John Clulow Loyd (Part 1 only); Laurence Alan Macintosh; Dennis George Madge; David Griffiths Martin (*Mark of Distinction in Thesis*); Ernest Mason (Part 1 only); John Alan Maudsley (Part 1 only); Hugh Vernon Mellor; Frank George Milsom (Part 1 only); Eric Walter James Mitchell; Noel Ennever Seton Morris; Horace George Moseley; Gordon Douglas Nash (Part 1 only); Denzil Bridge Nield; Frank Charles Otton; Thomas Derrick Oxley (Part 1 only); William Michael Tracey Parsons; Rustom Hormusji Pastakia; Edgar Fowler Peat (Part 1 only); Henry Richard Douglas Perryer (Part 1 only); Arthur Frederick Peterson (Part 1 only); Joseph William Pickering; Alfred Pickford; Ralph Arnold Pickmere; Thomas Pilkington; George Walter Pollard; Herbert John Powell (Part 1 only); Fredrick Ralph Pratten (Part 1 only); Albrecht Proskauer (*not a British subject*); Gilbert Ray; Ewart Brindley Redfern (Part 1 only); Philip Houghton Redknapp (Part 1 only); Arthur George Reeves (Part 1 only); Gilbert Preston Scott; James Johnstone Shannon; Alexander Jamieson Smith; David John Smith; Horace Alexander Fraser Spooner (Part 1 only); Kenneth Arthur Stevens; Arthur Swift (Part 1 only); John Percival Taylor; Russell Wardle Tippetts; Douglas Ronald Tooth (Part 1 only); Richard Michael Torrens (Part 1 only); Frank Albert Turner; Frederick John William Turner;

Ronald Ward; Alexander Frederick Watson (Part 1 only); Lewis Edward Webster (Part 1 only); Myles Frederic White; Herbert Leonard Williamson (Part 1 only); Ronald Dodd Wormald; Roland Keith Wright (Part 1 only); William James Wynn.

THE SPECIAL FINAL EXAMINATION

The Special Final Examination qualifying for candidature as Associate R.I.B.A. was held in London and Edinburgh from July 14 to 20, 1937.

Of the 55 candidates examined 16 passed (seven in Part 1 only) and 39 were relegated. The successful candidates are as follows:—

Frederick Bowman; Henry Walker Bullen (Part 1 only); Arthur Cecil Byne (Part 1 only); George Walker Callander; Reginald Douglas Derham (Part 1 only); Colin Jack Dixon; William Kennedy Laurie; Sidney George Lawrence (Part 1 only); Richard Little; Alfred Lloyd Frank Pegg; John Francis Shortall; Frederick George Southgate; Frederick George Sturrock; William Tarn (Part 1 only); Frank Waddington (Part 1 only); Joseph Erle Whitley (Part 1 only).

THE EXAMINATION IN PROFESSIONAL PRACTICE FOR STUDENTS OF SCHOOLS OF ARCHITECTURE RECOGNISED FOR EXEMPTION FROM THE R.I.B.A. FINAL EXAMINATION

The Examination was held in London and Edinburgh on July 20 and 22, 1937. Of the 12 candidates examined eight passed and four were relegated. The successful candidates are as follows:—

Sydney James Bubb; Frederick William Griffiths; Ian Brown Kinnear; John Augustin Le Rossignol; Miss Margaret Jean Sutherland Love; Miss Stella Marcia Scott; Ernest Fredrick Tew; Colin William Ledger Windle.

R.I.B.A. EXAMINATIONS

The questions set at the Intermediate, Final and Special Final Examinations held in June and July, 1937, have been published, and are on sale at the Royal Institute, price 1s. (exclusive of postage).

COMPETITION NEWS

MUNICIPAL BUILDINGS AND POLICE BUILDINGS

Architects of British nationality are invited to submit designs for Scunthorpe Municipal Buildings and Lincoln and Parts of Lindsey County Council Police Buildings to be erected at Scunthorpe, Lincolnshire. Mr. T. Cecil Howitt, F.R.I.B.A., has been appointed assessor, and the following premiums are offered: £500, £250, and £150. The last day for questions is September, 10, 1937; and the last day for submission of designs is November 19.

Conditions of the competition may be obtained on application to Mr. J. F. Auld, Town Clerk, Borough of Scunthorpe, Municipal Offices, 34 High Street, Scunthorpe, Lincs. Deposit: £2 2s.

ROYAL NATIONAL EISTEDDFOD OF WALES, 1938

In connection with the Royal National Eisteddfod of Wales, in Cardiff, next year, the authorities propose to hold a competition for (1) a scheme comprising a physical culture centre and baths in Cardiff; and (2) a design for a group of twelve dwellings for aged people, arranged on a village green and suitable in architectural character for the Vale of Glamorgan. Mr. Percy Thomas will assess the competitions, and the following premiums will be awarded: Section 1: £60, £30, and £20. Section 2: £30 and £20.

The conditions of competition will be drawn up by the assessor and forwarded to those competitors who apply to the General Secretary, Eisteddfod Offices, 11 Park Place, Cardiff, but no conditions will be issued later than March 31, 1938.

THE BELFAST COMPETITION

The result of this competition is printed on page 286.

EXHIBITIONS

[BY D. COSENS]

THE NATIONAL MARITIME MUSEUM, GREENWICH

THE Queen's House, at Greenwich, designed by Inigo Jones for Charles I's mother, and finished for his queen, Henrietta Maria, after whom it is named, was intended as a country house which, acting as a bridge over the old Deptford-Woolwich road should, for the Queen's convenience link the royal gardens on one side with the hunting park on the other. Colonnades commemorating Waterloo connect it on either side with wings built immediately afterwards. In its axial position to Greenwich Hospital and with the view of the Thames beyond, and the park rising steeply behind, it affords a magnificent site for the National Maritime Museum. Historically there could hardly be a better, and the Office of Works are to be commended on the excellent way in which they have carried out the restoration of the interior. The slight inaccessibility of this museum is more than compensated for if it is approached in the traditional way by river.

It has been founded "for the illustration and study of the maritime history of Great Britain." It houses the collection of sea pictures transferred by George IV from Hampton Court, Windsor, St. James' Palace, and Carlton House to the Gallery of Maritime Paintings at Greenwich Hospital; ship models and paintings presented by William IV; and the Nelson relics. These are incorporated with the collection of Sir James Caird, which includes the famous Macpherson prints and maps. There are sea pictures of every date and in every manner, many of them lovely as works of art, many of great historic interest, and amongst them some painted in the Queen's House itself by the Van de Velde's for Charles II.

In the Navigation room—by far the most interesting gallery of all—there are early telescopes, globes, compasses, and lodestones, and the remarkable chronometer with which Harrison, the illiterate son of a carpenter, won in 1764 the £20,000 prize which had been offered by the Admiralty, at Newton's suggestion, fifty-one years previously. Here, too, are charts and maps, some as early as the fifteenth century, enchanting in themselves, and a reminder that the true history of the sea is not in the finest pictures of ships or relics of battles, but in the adventuring of men who, in an age of ignorance and superstition which it is hard for us to visualize, sailed the unknown world by dead reckoning, with the help of very primitive navigating instruments, and who made these charts and maps to guide them on their voyages.

SHOWROOM AND OFFICES, LEYTONSTONE

DESIGNED BY
G. GREY WORNUM
FOR ARCHITECTS'
COMMITTEE

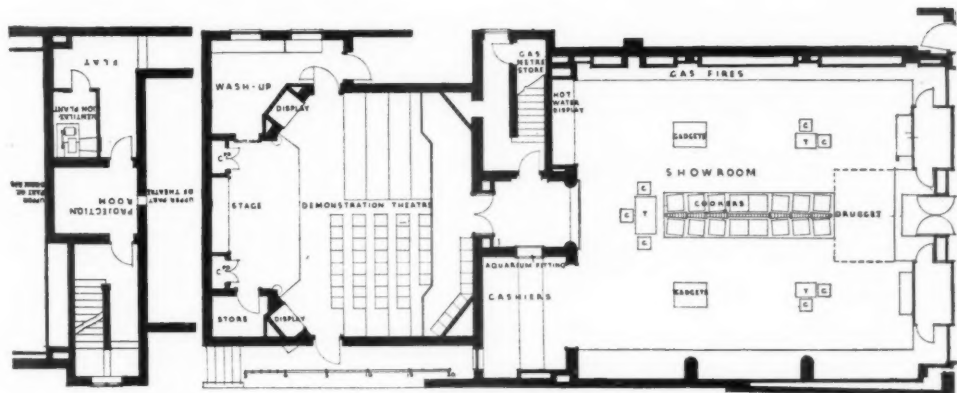


GENERAL PROBLEM—The building is part of a scheme of general expansion by the Gas Light and Coke Company. It is one of a series of showrooms extending from Windsor to Southend. The scheme is directed by an advisory panel of six architects.

Principal requirements were: the display of gas appliances, accommodation for clerical staff and a theatre for cooking demonstration and cinema shows.

EXTERNAL FINISHING—The lower façade is faced with grey granite having splayed joints to form a simple and decorative panelled surface.

The photograph shows the main front.



GROUND FLOOR PLAN

SHOWROOM AND OFFICES, LEYTONSTONE:



PLANNING—The main entrance gives direct access to the showroom, the side walls displaying gas fires, refrigerators, wash boilers, etc. The central fixture is a gas cooker display; side tables for smaller appliances. The policy is to allow the public to see right into the showroom from the street while still allowing for display at low level, thus obtaining at the same time a large amount of natural light in the showroom.

A small connecting lobby leads from the showroom to the theatre, seating approximately 100 people. The stage is sunk so that the audience have a view of the top of the demonstration table. In an annexe a small kitchen is provided for the serving of teas.

A mezzanine floor above the connecting lobby accommodates the projection room and ventilating chamber.

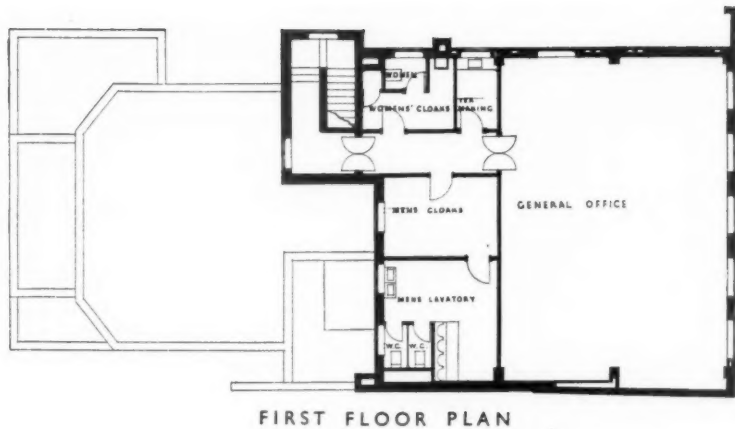
On the first floor are clerks' office, accommodation for 12 clerks, typists and telephone exchange girl.



The photographs show : top, the cash desk ; bottom, the showroom.

SECTION

B Y G . G R E Y W O R N U M

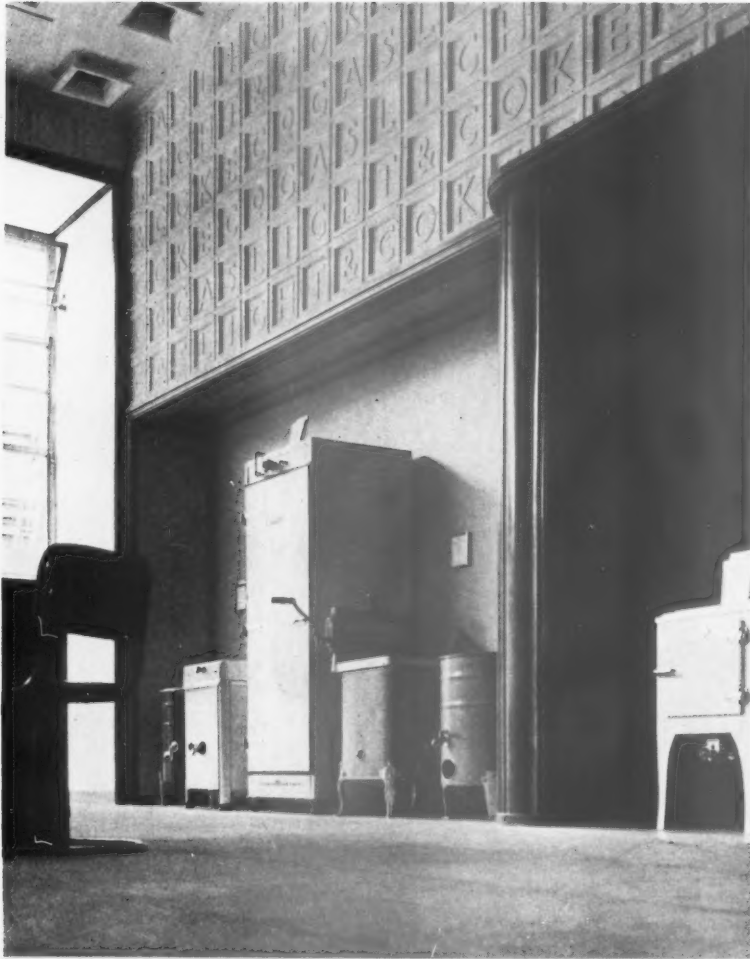


INTERNAL FINISHING—In the showroom the lower portion of the walls is carried out in a material which provides a washable and decorative surface. A richness is provided above by the fibrous plaster panelled surface inscribed with the lettering

“Gas Light and Coke Co.” All hardwood is Australian black walnut. The floor is carpeted green Wilton.

The photograph shows the demonstration theatre.

SHOWROOM AND OFFICES, LEYTONSTONE

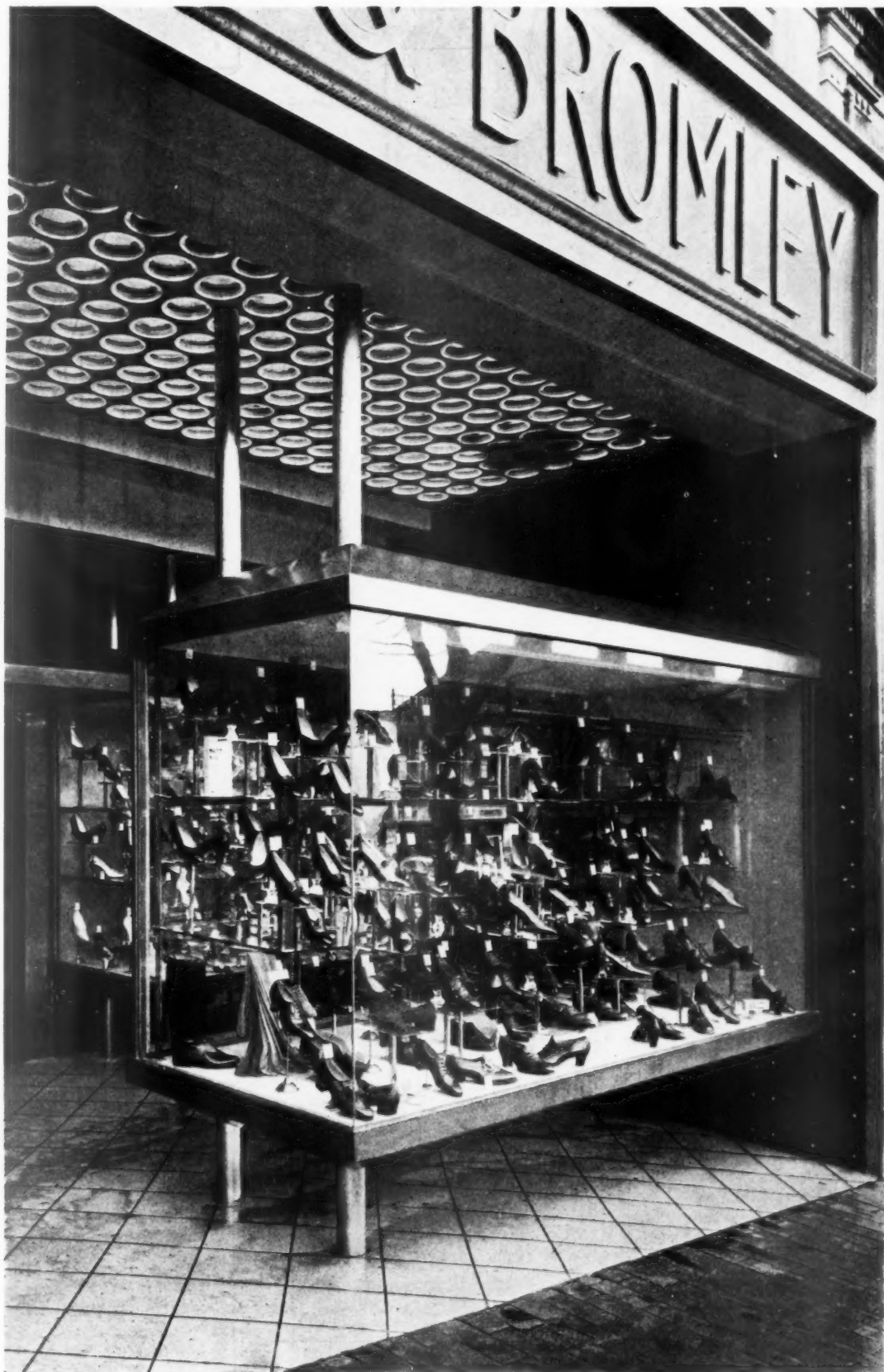


HEATING—The heating throughout is by a gas heater, which is on display in the main showroom. The photographs show two views of the showroom.

DESIGNED BY
G. GREY WORNUM
FOR ARCHITECTS'
COMMITTEE



WORKING DETAILS : 583
SHOPFRONT • TUNBRIDGE WELLS, KENT • CLIVE ENTWISTLE

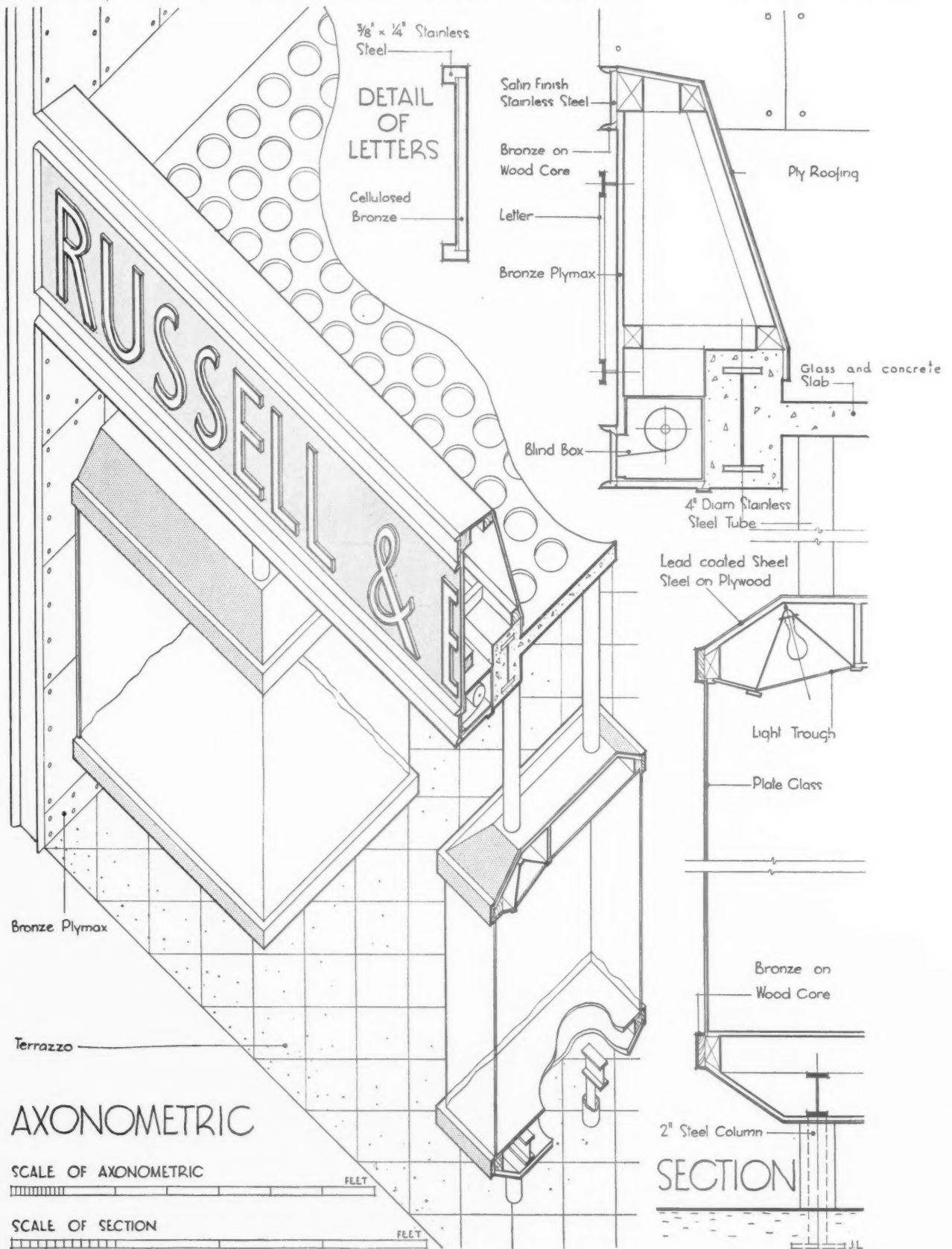


The shopfront construction consists of side walls of bronze-faced plywood, fixed with aluminium-headed screws. The showcase framing is of bronze sheet drawn over hardwood, with lead-coated sheet steel on plywood for the tops of the showcases. Columns

carrying cases are of stainless steel tube. The ceiling to the lobby is of glass-concrete; the fascia is bronze and lettering of stainless steel. The backs of showcases are matt-cellulosed eau-de-nil. Details of the shopfront are illustrated overleaf.

WORKING DETAILS : 584

SHOPFRONT • TUNBRIDGE WELLS, KENT • CLIVE ENTWISTLE



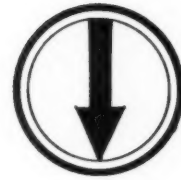
AXONOMETRIC

SCALE OF AXONOMETRIC
FLEET

SCALE OF SECTION
FLEET

Axonometric and details of the shopfront illustrated overleaf.

The Architects' Journal Library of Planned Information

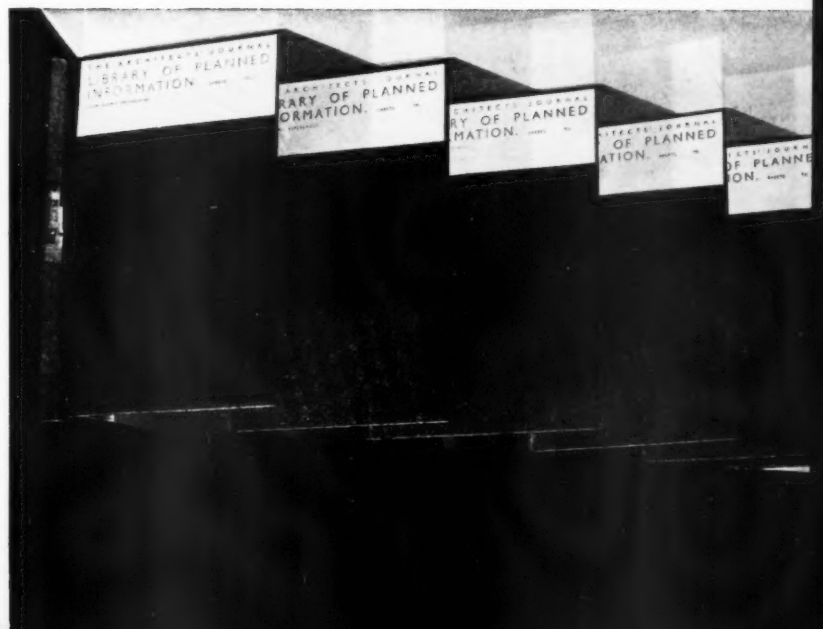


INFORMATION SHEET
S U P P L E M E N T

S H E E T S I N T H I S I S S U E

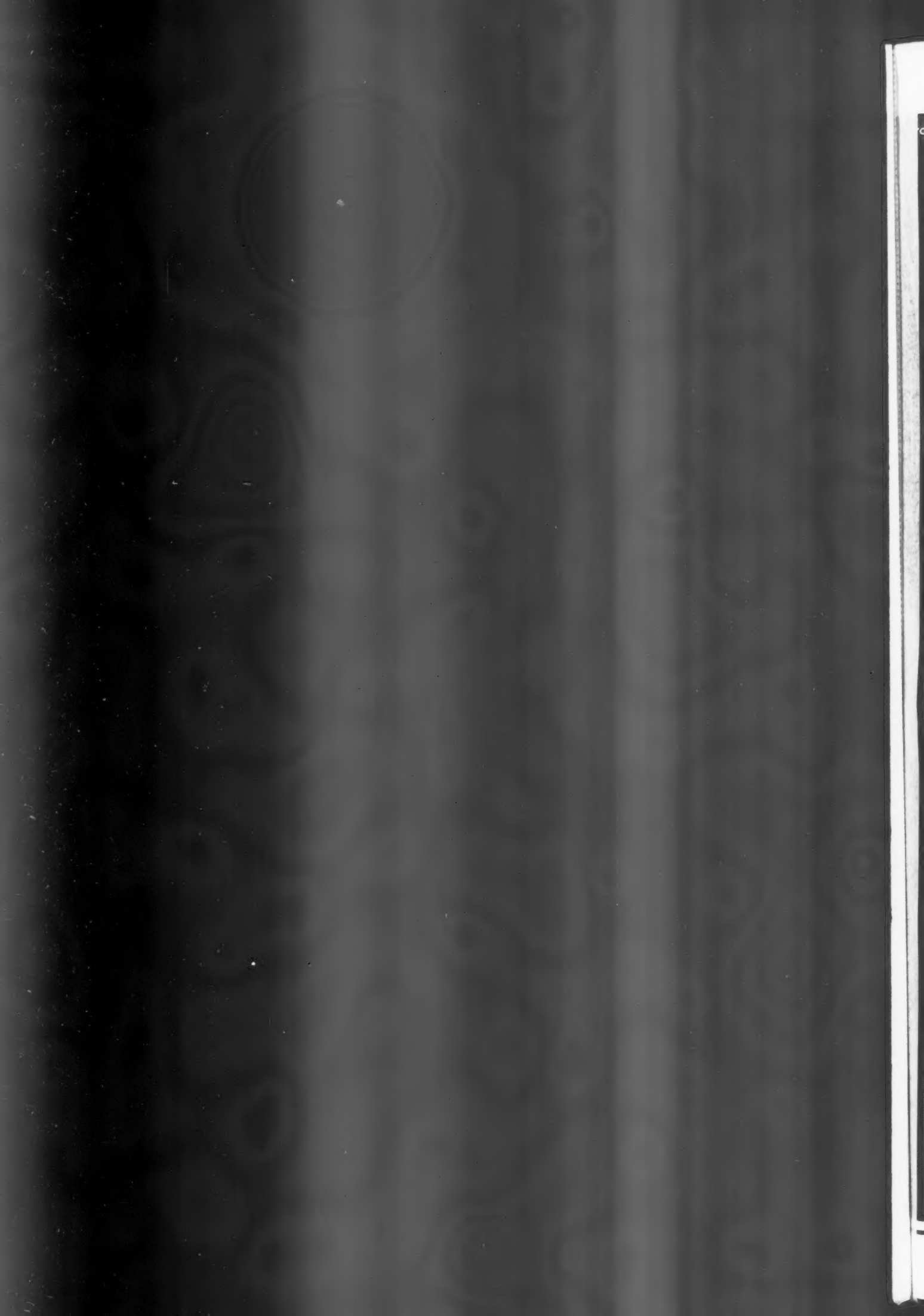
5 4 8 Wallboards

5 4 9 Elementary Schools—V



Sheets Issued since Index :

- 501 : Aluminium
- 502 : Fixing Blocks
- 503 : Approximate Estimating—XII
- 504 : Aluminium
- 505 : Aluminium
- 506 : Approximate Estimating—XIII
- 507 : Plumbing : Jointing of Copper Pipe
- 508 : Roofing—Valley Flashings
- 509 : The Equipment of Buildings
- 510 : Aluminium
- 511 : Elementary Schools—II
- 512 : School Lighting
- 513 : Approximate Estimating—XIV
- 514 : Air Conditioning
- 515 : Insulation of Buildings
- 516 : Cycle Parks
- 517 : Cycle Parks
- 518 : Plumbing Systems—II
- 519 : Kitchen Equipment
- 520 : Roofing—Flashings
- 521 : Motor Cycle Parks
- 522 : Reinforced Asbestos-Cement Roofing Tiles
- 523 : Poison Gas Precautions
- 524 : Kitchen Equipment
- 525 : Metal Reinforced Asbestos Cement
- 526 : Leadwork to Photographic Developing Tanks
- 527 : Asbestos-Cement Corrugated Sheets
- 528 : Cycle Parks
- 529 : Kitchen Equipment
- 530 : Asbestos-Cement Corrugated Sheets
- 531 : Plumbing
- 532 : Roofing—Flashings
- 533 : Asbestos-Cement Corrugated Sheets
- 534 : Insulation of Buildings
- 535 : The Equipment of Buildings
- 536 : Asbestos-Cement Ventilators
- 537 : Slate Window Cills, etc.
- 538 : Petroleum Storage
- 539 : Linoleum
- 540 : Plumbing
- 541 : Linoleum
- 542 : Garage Equipment
- 543 : The Equipment of Buildings
- 544 : Sheet Leadwork
- 545 : Elementary Schools—III
- 546 : Elementary Schools—IV
- 547 : U.S.A. Plumbing—III



03.

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

CLASSIFICATION OF THIN FIBRE BOARDS, FLEXIBLE WALL LININGS, & INSULATION BOARDS.

THIN FIBRE BOARDS AND FLEXIBLE WALL LININGS.

NAME.	Country of Origin.	Thick-ness.	Sizes available.	Approx weight per sq. ft.	Thermal conduc-tivity, B.Th.U.s	Sound Absorp-tion, 512~	Boards per bundle.	Basic price.
ENSOWAL.	Finland.	3/16"	6, 7, 8, 9, 10, 12, 14, and 16 ft. x 3. and 4 ft.	.56 lbs.	•	•	10.	17/8 d. Sq. ft.
ESSEX.	England.	3/16"	6, 7, 8, 9, 10, 12, 14, and 16 ft. x 3. and 4 ft.	.56 lbs.	.531.	•	10.	17/8 d. Sq. ft.
		1/4"	8, 12, and 16 ft. x 4 ft. also 8 and 16 ft. x 3 ft.	.72 lbs.	•	•	8.	2 1/4 d. Sq. ft.
TUFBORD.	Finland.	3/16"	6, 7, 8, 9, 10, 12, 14, and 16 ft. x 3. and 4 ft.	.56 lbs.	•	•	10.	13/4 d. Sq. ft.
ENSOFLEX.	Finland.	1/16"	50 and 75 ft. long x 7. 8 1/2. and 10 ft. wide.	•	•	•	In rolls of 5 size.	8 1/2 d. Sq. yd.

INSULATION BOARDS.

B. P.	Canada	7/16"	8, 9, 10, 11, 12, 14, and 16 ft x 4 ft. also 8, 9, 10 and 12 ft x 3 ft.	.81 lbs.	.38.	.27.	5.	2/0 Sq. yd.
CANEC. Structural Insulation Board.	U.S.A.	1/2"	6 to 16 ft. x 3 and 4 ft. also 6 to 12 ft x 6 ft.	.6 lbs.	.33.	.29	6, 8 and 10	2/0 Sq. yd.
		1"	8, 9, 10 and 12. ft. x 3, 4 and 6 ft.	1.2 lbs.	.33.	.29	3 and 4.	4/0 Sq. yd.
CANEC. Lath as base for plaster.	U.S.A.	1/2"	48" x 18" (Long edges rebated and chamfered.)	.6 lbs.	•	•	18.	2/0 Sq. yd.
CELOTEX.	U.S.A.	1/2"	7, 8, 8 1/2, 9, 10, 11, 12 and 14 ft. x 3, 3 1/2 and 4 ft.	.6 lbs.	.33.	.26.	8.	2/0 3/4 Sq. yd.
C=X.	U.S.A.	5/16"	7, 8, 8 1/2, 9, 10, 11, 12 and 14 ft. x 3, 3 1/2 and 4 ft.	.45 lbs.	•	•	12.	1/4 Sq. yd.
DONNACONA.	Canada.	1/2"	7, 8, 9, 10, 11, 12 and 13 ft. x 3, 3 1/2 and 4 ft.	.7 lbs.	.37.	.25.	8.	2/0 Sq. yd.
INSULITE.	Finland.	1/2"	6, 7, 8, 8 1/2, 9, 10, (8) 11, 12 and 14 ft (6) x 3 and 4 ft.	.75 lbs.	.33.	.28.	8 and 6.	2/0 Sq. yd.
		5/16" or 8 m.m.	6, 7, 8, 9, 10, 11 and 12 ft. x 3 and 4 ft.	.5 lbs.	.33.	.28.	10.	1/4 Sq. yd.
INSULWOOD.	England.	1/4"	8 ft. x 4 ft. also 6 and 4 ft. x 2 ft.	.37 lbs.	.36	.26.	20.	1/2 Sq. yd.
		1/2"	6, 8, 9 and 12 ft. x 3 and 6 ft. also 6, 8, 9, 10, 11 and 12 ft. x 4 ft.	.75 lbs.	.36	.26.	10.	2/0 Sq. yd.
		1/2"	4 ft. x 2 ft. for plaster base or roof insulation.	.75 lbs.	.36	.26.	200 sq. ft.	1/3 Sq. yd.
LLOYD.	England.	3/4"	6 ft. x 4 ft. 6, 8, 9, and 12 ft. x 3 ft. also 6, 9 and 12 ft x 6 ft.	1.12 lbs.	.36	.26.	7.	3/0 Sq. yd.
		1/2"	4, 6, 7, 8, 9, 10, 12 and 14 ft. x 4 ft. (3 ft. widths to order.)	.75 lbs.	.34.	.35.	8.	2/0 Sq. yd.
		7/16"	4, 6, 7, 8, 9, 10, 12 and 14 ft. x 4 ft.	.66 lbs.	.34.	.35.	10.	1/9 Sq. yd.
LLOYD BITUMINOUS.	England.	5/16"	4, 8, 10, 12 and 14 ft. x 4 ft. (3 ft. widths to order.)	.47 lbs.	.34.	.35.	10.	1/3 Sq. yd.
		1/2"	10, 12 and 14 ft. x 4 ft.	.75 lbs.	•	•	8.	3/6 3/4 Sq. yd.
L.W.	Sweden.	1/2"	4, 6, 7, 8, 9, 10, 12 and 14 ft. x 3 and 4 ft.	13/2 oz.	.38.	.35.	8.	2/0 Sq. yd.
		5/16"	4, 6, 8, 9, 10 and 12 ft. x 3 and 4 ft.	7/4 oz.	.38.	.35.	10.	1/4 Sq. yd.
		1/4"	6, 8, 9, 10 and 12 ft. x 3 and 4 ft.	6 1/2 oz.	.38.	.35.	10.	1/1 1/2 Sq. yd.
MAFTEX.	U.S.A.	1/2"	6, 7, 8, 8 1/2, 9, 10, 12 and 14 ft. x 3 ft. and 4 ft.	.81 lbs.	.34.	.20.	8.	1/10 Sq. yd.
		5/16"	6, 7, 8, 9, 10, 11 and 12 ft. x 4 ft.	.5 lbs.	.34.	.20.	16.	1/3 Sq. yd.
MASONITE.	Sweden.	7/16"	4, 6, 8, 9, 10 and 12 ft. x 4 ft.	.75 lbs.	.36.	.27.	10.	2/3 Sq. yd.
TENTEST.	Canada.	1/2"	6, 7, 8, 9, 10, 11, 12, 13 and 14 ft. x 3 ft. (8), 3 1/2 ft. (7) and 4 ft. (6).	.72 lbs.	.38.	.25.	8, 7 and 6.	2/0 Sq. yd.
		5/8"	6, 7, 8, 9, 10, 11, 12, 13 and 14 ft. x 3 ft. (7), 3 1/2 ft. (6) and 4 ft. (5).	.9 lbs.	.38.	.25.	7, 6 and 5.	2/2 1/2 Sq. yd.
TREETEX.	Sweden.	1/2"	8, 8 1/2, 9, 10, 12, 14 and 16 ft. x 3 and 4 ft.	.55 lbs.	.266.	.29. SABINE.	8.	2/0 Sq. yd.
		1/4"	8, 9, 10 and 12 ft. x 3 and 4 ft.	.27 lbs.	.266.	.29. SABINE.	16.	1/3 1/2 Sq. yd.

Information from C. F. Anderson & Son Ltd.

INFORMATION SHEET: WALLBOARDS: TECHNICAL AND GENERAL DATA: NO. 2
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1. Eric A. Sayre

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 548 •

WALLBOARDS

General :

This Sheet is one of a series on wallboards, and deals with thin fibre boards, flexible wall coverings, and insulation boards.

Uses :

The types of board described are suitable for the following uses :—

- (a) For internal wall and ceiling linings.
- (b) As a backing for finished plaster in place of wood or metal lath.
- (c) As permanent shuttering to concrete floors or walls.
- (d) For thermal and acoustic insulation.
- (e) For prevention of sound transmission and absorption of sound.
- (f) For acoustical correction.

Composition and Manufacture :

The following notes describe the composition and manufacture of certain of the boards described on this Sheet.

Ensowal :

Mechanical and chemical wood fibre laminated.

Tufbord, Essex :

Wood fibre laminated board.

Ensoflex :

Mechanical and chemical wood fibre made into a flexible and corrugated board.

B.P.

Made from ground spruce fibres, chemically treated and having 4 layers of asphaltic adhesive.

Canec, Celotex :

Cane fibres felted together into boards.

Donnacona :

Felted spruce fibres.

Insulite :

Mechanical fibre felted into boards, canvas textured on one side, smooth linen finish on reverse.

Insulwood :

Mechanical wood cellulose fibre board homogeneous and waterproofed, can also be obtained flameproof.

Lloyd :

Waterproofed wood fibre well felted together and pressed into homogeneous boards.

Lloyd Bituminous :

Wood fibres thoroughly mixed with bitumen, well felted together and pressed into homogeneous boards.

L.W. :

Mass of wood fibre pressed between large rollers.

Maftex :

Long, tough, sterilized fibres of liquorice root waterproofed and felted into single-ply boards.

Masonite :

Timber exploded by high pressure steam into long tough lignine coated fibres afterwards felted together and pressed.

Tentest :

Spruce mechanical fibre waterproofed and pressed into homogeneous sheets.

Treetex :

Felted and waterproofed wood fibre board.

Thermal and Acoustic Properties :

The thermal insulating values given here represent thermal conductivity in British Thermal Units per sq. ft., per in. thickness, per degree Fahrenheit, per hour.

These figures have been supplied by various authorities, which are indicated by small initials in the corresponding columns, as follows :—

- A. The Building Research Station.
- B. The Bureau of Standards, Watson.
- C. The Department of Scientific and Industrial Research.
- D. The National Physical Laboratory.
- E. The University of Toronto.
- F. The U.S. Bureau of Standards.
- G. Professor Gebhardt.
- H. M.T.I.S.G.
- I. Vern O. Knudsen.
- J. Armour Institute of Technology, Chicago, Peebles.

Application and Fixing :

Practically all the wallboards mentioned in this list are suitable for distempering, painting, enamelling, papering or plastering, and for the latter, small size plaster base boards having a low density are most suitable.

It is essential that all wallboards should be fixed in strict accordance with the manufacturers' instructions, particularly so far as the type of nail is concerned. It is essential that the wallboard should not be taken direct from the crate and applied to the wall or ceiling ; at least 48 hours should elapse before fixing takes place. This is most important and ensures that there will be no contraction or expansion of the board if the nailing is properly done.

Regarding joints, a popular method for the better type of building is to accentuate these either by leaving a space between the boards or bevelling the edges of same. Alternatively, various types of plain and corrugated linen and anaglypta strips are made specially for joint covering.

Information from : C. F. Anderson and Son,
Ltd.

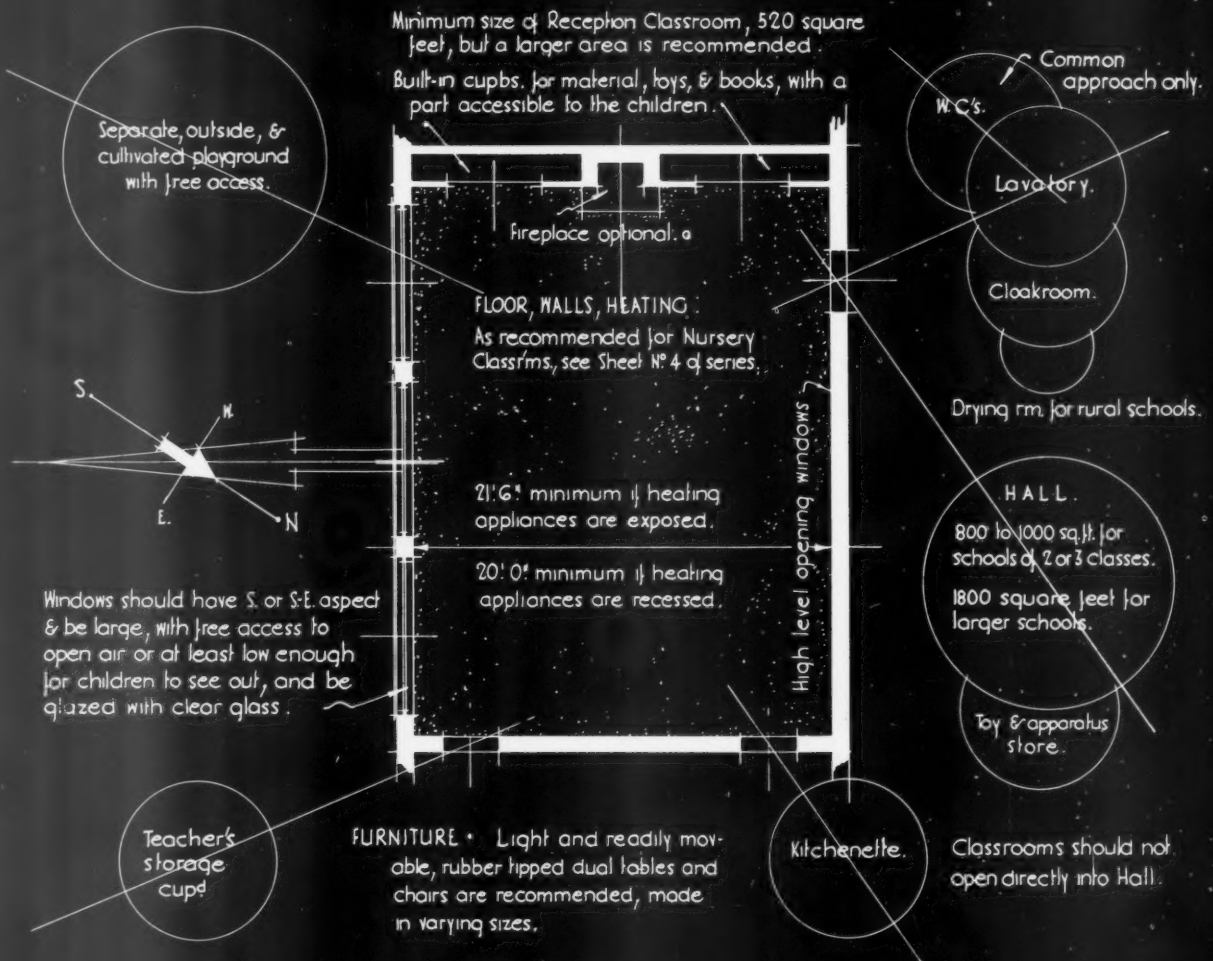
Address : 13 Essex Road, London, N.1

Telephone : Clerkenwell 8151



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DIAGRAMMATIC SCHEDULE OF INFANTS' SCHOOLS ACCOMMODATION : (B.) INFANTS' RECEPTION CLASSES :
 For recommendations regarding Nursery Class accommodation, see previous Information Sheet No. 4 of this series.



DIAGRAMMATIC LONGITUDINAL SECTION THROUGH AN INFANTS' SCHOOL HALL



Extracts from *Elementary School Buildings* issued by the Board of Education, 1936.

INFORMATION SHEET : ELEMENTARY SCHOOL BUILDINGS : No. 5.
 SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WCI • *Dec. 2. 1937*

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 549 •

ELEMENTARY SCHOOLS—V

Subject: Infants' Schools Accommodation

The information on this Sheet is a summary of the recommendations regarding the accommodation of reception classrooms for infants' schools, contained in the Board of Education's Pamphlet No. 107, "Suggestions for the Planning of Buildings for Public Elementary Schools," published in 1936 by His Majesty's Stationery Office, and reproduced here by permission of the Controller.

General :

The suggestions already made in detail on the provision of suitable premises for children attending school at three years of age, see Sheet No. 4 of this series, can be modified gradually to suit the needs of older children. The reception classes dealt with on this Sheet, however, should be housed in rooms rather larger than the ordinary classroom. As a whole, it may be said that the minimum needs of a reception class are space, easy access to suitably planned lavatory, W.C.'s, and cloakroom, and to the playground, and equipment with such furniture, toys and apparatus as the age and outlook of the children demand.

Playground :

The Board recommends that every Infants' school should have a separate playground and the site should be adequate for this purpose. In the case of infants, the playground is in a special sense an educational space, and it is,

therefore, very desirable that some portion of it should be laid out with grass and flower beds. Wherever possible any trees which exist on the site should be preserved, and it is not necessary to level any gentle slopes. Sufficient level and hard surface will be needed for physical training out of doors, but the real value of the playground to young children will be lost if it consists merely of a bare asphalted space.

The Hall :

The requirements of physical training, music, rhythmic work and general assembly cannot be adequately met in an infants' school without a hall, though, the Board states, there may be some schools so small as to justify the acceptance of some alternative provision in the shape of a large room. In addition, the widely increased interest and co-operation of the parents go far to necessitate the provision of a hall for meetings and entertainment, while numbers of classes may be grouped for purposes of listening to suitable wireless talks, or for seeing cinematograph films and lantern slides as illustrations of geography, history and nature study lessons.

The placing of the hall should be carefully considered to ensure that the noise of physical training or singing lessons does not disturb the work in the classrooms.

Ceilings should be flat, with or without coves. If curved, it is important to avoid the dome, the barrel, and the segmental curve struck from near the floor level. The flooring should not be of jointless material, while boarded floors are the noisiest. Hard plasters used over all the wall surfaces in the hall will increase reverberation, and if it is not practicable to use lime plaster, a strong hygienic sound-absorbent such as perforated fibre slabs, or some form of porous plaster, should be placed on the rear wall behind the audience. Where there is a gallery, the front should be treated in the same way and a cord carpet laid on the floor.

Previous Sheets :

The first four Sheets in this series are Nos. 486, 511, 545, and 546.

HOUSING AND TOWN PLANNING

Ministry of Health's Report

THE Eighteenth Annual Report of the Ministry of Health finds Sir Kingsley Wood congratulating the nation that "English men and women, and more particularly English children, enjoy a healthier and fuller life than at any time since the Industrial Revolution."

"The provision of over 3,000,000 new and decent houses, coupled with the reconditioning or destruction of those which are unfit," he adds, "is probably the greatest contribution which this generation has made to better health. Much is also due to the general improvement in working conditions since the war. . . ."

The year 1936-37 with which the report deals was marked by three Reports of outstanding social importance—the Report on the Overcrowding Survey, the First Report of the Advisory Committee on Nutrition and the Reports on the Investigation into Maternal Mortality.

The coming Autumn's national campaign for physical fitness has been planned very largely since the period with which this report deals and the subject has little explicit mention in the report. It is recorded a little vaguely that "during school years . . . there are arrangements . . . for healthy exercise and recreation" but beyond that the account is confined to the amount of loans sanctioned for the provision of public parks, recreation grounds and playing fields. The total amount of £3,196,002 included £1,952,270 for the purchase of land. The corresponding figures for 1935-36 were £2,467,245 and £1,109,889. The acreage bought was 9,059, including 1,030 acres acquired under Section 69 of the Public Health Act, 1925, for grounds which could be let for games; the 1935-36 figures were 4,732 acres and 1,322 acres.

In addition, 3,570 acres were acquired under Local Government Act powers for the benefit, improvement and development of towns at a cost of £736,096; some of this land will be available for the purposes mentioned above. During the year over 500 acres were presented to Local Authorities or to the National Playing Fields Association. Touching the London Green Belt Scheme, it is recorded that the L.C.C. had approved by the end of the year areas amounting to approximately 29,500 acres, and had made provisional offers of assistance to its neighbour councils of £1,166,000.

The loans sanctioned in 1936-37 for public baths and wash-houses, including open air baths, amounted to £790,975 as compared with £1,160,242 in the previous year. The amount includes a sum of £99,156 (compared with £214,056 last year) for open air baths in recreation grounds, which is included in the total amount of £3,196,002, sanctioned for public parks and so on.

The section of the report dealing with housing and town planning is a full summary of work done. The five-year programme of slum clearance and rehousing has undergone much revision; the clearance area programme, for instance, has increased by 28 per cent. (in rural areas 55 per cent.). Taking clearance areas with individual

demolitions, the total revised programme is now 377,930, an increase of 35 per cent.

A note on the cost of new dwellings shows that the average building price of all non-parlour dwellings during the year was £324 as compared with £310 during the previous year. The corresponding figures for ordinary non-parlour houses were £323 and £304.

A table shows the differences in cost between three classes of dwellings. Ordinary non-parlour houses in March 1937 cost £342; a year earlier they cost £307. The figures for small one-bedroomed dwellings were £246 and £221; and for dwellings in buildings of three or more storeys £501 and £491.

Importance attaches itself to a section headed "Notes on the Preparation of Schemes" which suggests some tentative conclusions on one or two large issues in town and country planning.

The necessity for planning the countryside raises one of the most difficult problems with which Local Authorities are faced. "What degree of control can and should be applied to rural or agricultural areas and landscapes of special beauty?"

Total reservation, it is observed, is practicable only to a limited extent, "as it would clearly be inadvisable for authorities to expose themselves to claims for immediate compensation for loss of potential value over tens of thousands of acres within the next few years and the problem in the minds of authorities is to devise a zoning which will not expose them to these claims on any substantial scale."

Some authorities have secured a happy medium between private freedom and public control by arranging, in agreement with landowners, to permit only agricultural buildings and dwelling-houses at a density of acres per house (this being a provision "Limiting the number of buildings"), grouped development to be subject to consent; and several of the rural schemes before the Minister for consideration contain proposals controlling building over the as yet, undeveloped stretches of country on this basis, the densities varying from one house to two acres, through one house to five acres, 10 acres, 50 acres, down to one house to 100 acres.

"As far as can be judged," says the report, "the 'one house to so many acres' zoning seems to be at present the most popular method of dealing with agricultural and rural areas for which reservation is either not appropriate or is impracticable; but—although no scheme of this description has yet been tested out—it should be borne in mind that it is neither the only solution nor the most appropriate in all cases."

A note discusses the results of conferences held during the year with representatives of local authorities in and near London about the control which can properly be exercised over the erection of flats by private developers. A "population" clause was substituted in the revised edition of the Model Clauses for the old "building unit" clause, and the advisory committee recommended a standard of 100 persons to the acre. The Minister has also had occasion, it is recorded, to review the question whether Planning Authorities should attempt to confine flats to specified areas of their districts, or even to exclude them altogether.

"The practical conclusion is that in preparing their Scheme Local Authorities should not attempt to confine flats to specified areas. This conclusion is reinforced by the consideration that any strict limitation of the areas to which flats which have free entry might have the extremely undesirable result of enormously enhancing the value of the land in the 'free' areas. In order, however, that the Responsible Authority may have adequate powers to control the immediate location of flats, they should be made subject to consent throughout the residential areas."

On planning in the London area it is reported that "the Minister asked all Local Authorities in the region to concur in the substitution of a Regional Standing Conference whose function should be to consider any questions referred to it. This has been generally agreed and the Conference is being set up."

General Position of the Building Industry

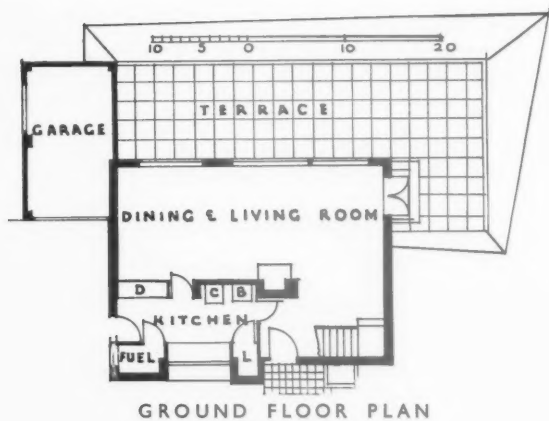
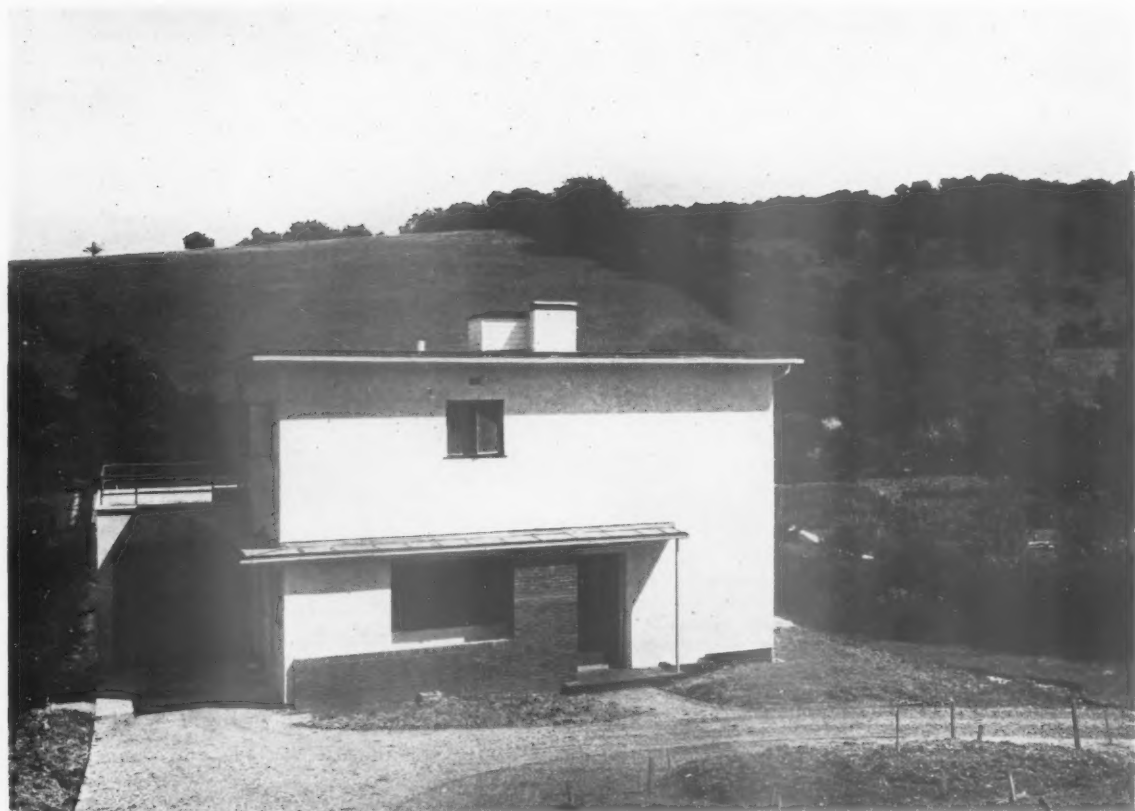
A penetrating analysis of the situation in relation to structural steel supplies is included in the current issue of *The Building Industries Survey* published by the Building Industries National Council, in the course of which the little-known fact is established that the building and allied industries are the largest consumers of steel in the country, taking more than one-third of the total finished steel output. "An analysis of the home shortage of structural steel reveals an anomalous position since exports of structural descriptions show a considerable increase this year. The view is expressed that every effort will be made, by the use of alternative methods, to reduce the demand for steel to a minimum while present difficulties last. In this connection it is interesting to note that the design for the new Waterloo Bridge, for which a tender of £670,000 has been accepted, provides for a reinforced concrete structure requiring only some 5,000 tons of steel.

"The position of the building industry is very satisfactory, with activity at a high level. The rate of unemployment is the lowest recorded since 1929, in spite of an increase of one-quarter in the numbers insured in the industry since that date.

"Housing activity is at a very high level. The number of houses built in England and Wales during the year ended March 31, 1937, was a record, and amounted to 346,047, which is 21,187 in excess of the number provided in the previous year. The number of houses built in the half-year ended March 31, 1937, was 181,462. Described by the Minister of Health as 'an unprecedented figure,' it was 6,519 in excess of that for the corresponding half-year of 1936, which was a record at the time. The number of houses built by private enterprise without State assistance during the half-year ended March 31, 1937, was 145,789, being 18,062 more than the number completed in the preceding half-year.

"The other branches of the industry are also very active, and plans for non-residential buildings are running at the rate of almost £40 millions a year, as compared with an actual figure for 1936 of £29.6 millions."

HOUSE AT WOLDINGHAM, SURREY :



GENERAL PROBLEM—The house was planned in as open a manner as possible, in order to gain the maximum effect of space and light.

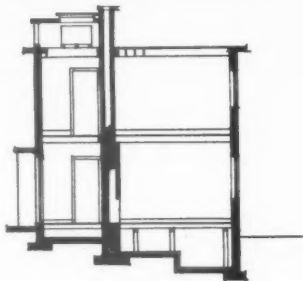
CONSTRUCTION AND EXTERNAL FINISHES—Walls are formed of 4½-in. brick outer skin, 1½-in. cavity and 4-in. clinker concrete blocks internally. The walls externally rendered over and finished in cement rendering. The main roof is

formed of layers of felting and bitumen on boarding, with a thick bed of shingle and gravel for insulation purposes. The smaller roof, forming a terrace, is paved with white tiles. Metal windows are used throughout, with special combined external and internal slate cills, which overhang internally to form a protection over the radiators.

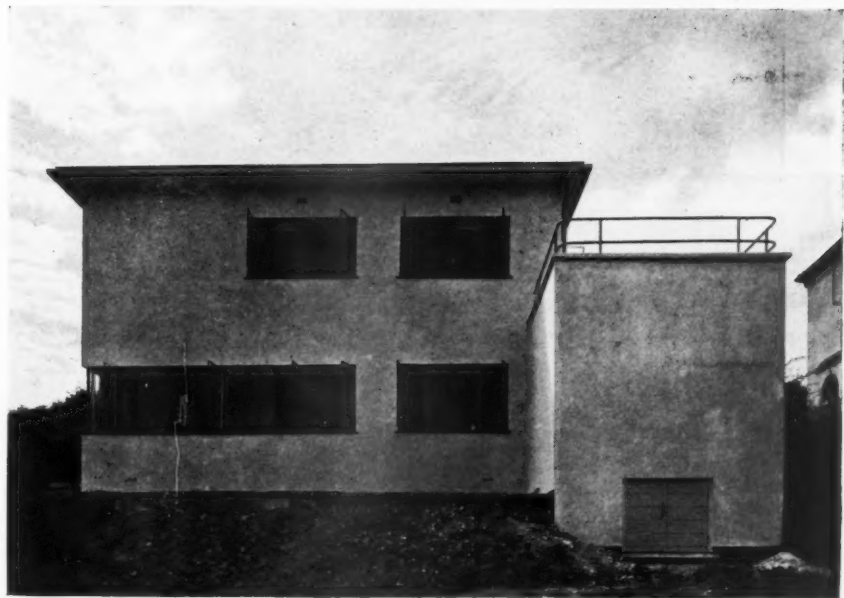
The photograph shows the entrance front.

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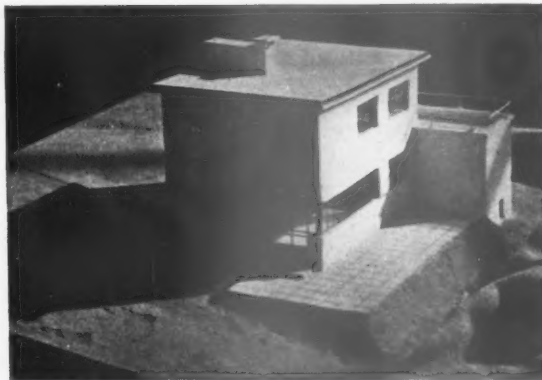


SECTION



The photographs show : Above, right, the entrance hall ; above, left, doors opening to the terrace from the living room ; right, the garden front.

HOUSE AT WOLDINGHAM, SURREY



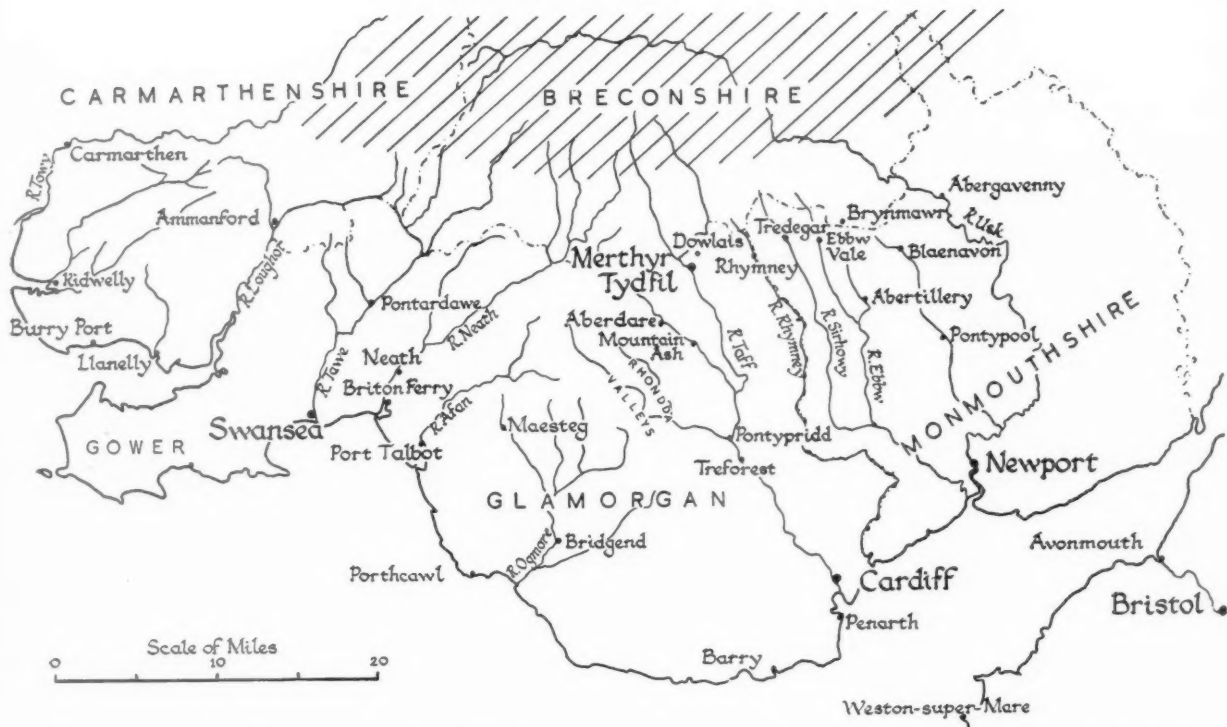
DESIGNED BY

E. MAYORCAS

INTERNAL FINISHES—On the ground floor generally, hardwood flooring is used throughout. The kitchen is planned as one completely fitted unit, with a dividing wall between the dining room, formed entirely of one big two-way cupboard fitment, accessible both from the kitchen and dining room.

SERVICES—The house is entirely centrally heated, with a completely independent circuit worked off the one boiler, which also provides the hot water.

The photographs show: Above, the dining and living room; left, two views of a model of the house.



This map was specially designed by Mr. Philip Massey to accompany his review, and was executed by Miss E. Bicknell. It will be noted that the map shows mainly the rivers. It has not been practicable to show roads and railways in addition. Outside the coastal plain these in the main necessarily follow the river valleys.

L I T E R A T U R E

SOUTH WALES

[BY PHILIP MASSEY]

The Second Industrial Survey of South Wales. In three volumes. Part 1: Industries, Part 2: Facilities, Part 3: Development. Price for the set 30s. net; Vol. 1 separately, 15s. net. Vols. 2 and 3 separately, 10s. 6d. net each. Cardiff: University of Wales Press Board.

THIS Survey was undertaken by the National Industrial Development Council of Wales and Monmouthshire with the aid of a grant from the Commissioner for the Special Areas. Though operating of necessity in conformity with the officially approved terms of reference, the authors have been free to speak their minds within those boundaries, and the Survey is not an official report.

Professor H. A. Marquand, of the University College of South Wales and Monmouthshire, was the Director of the Survey, with Messrs. Terence Young, Michael Lindsay and J. N. Reedman as Assistant Directors. A number of specialists contributed to particular sections of the Survey, and Mr. Alwyn Harris acted as Research Assistant.

The terms of reference explicitly directed the work towards the ascer-

tainment of industrial potentialities, but the interpretation of this basic limitation seems to have been sufficiently broad, except in two respects to which attention is called in the Introduction. The Survey, it must be clearly understood, could not concern itself with the social aspects of unemployment, housing conditions and poverty, but only with these factors in so far as they bear on the problems of industrial development.

The area covered by the Survey is that of the whole industrial region of South Wales, not merely of the official Special Area.

After a chapter on population, which draws attention to the great volume of migration from South Wales since 1921 and attempts an estimate of future population, the first volume is concerned with the existing industries of the region. The chapter on coal mining devotes a good deal of attention to the harmful effects, on the industry of a number of political decisions; this account shows in advance that some form of special assistance would be justifiable simply to redress the balance of opportunity.

From the chapter on metal and engineering industries, it seems clear that

the great industrial plant now in course of construction at Ebbw Vale will not in itself increase permanent employment in South Wales. Other works will be closed. The point is that technical rationalization was essential in any case, and that the alternative to the Ebbw Vale development was new development somewhere else, not the indefinite continuance of the present state of affairs in the industry.

A useful chapter on transport and ancillary industries is followed by extraordinarily interesting and valuable studies of the distributive trades and other industries. The Survey raises a number of points which may account for the recent rapid increase in employment in distribution in South Wales and in Britain as a whole—one-man shopkeeping as the alternative to prolonged unemployment, the increase in the average number of transactions per £, depression as leading in some cases to decentralization of shopping, and so forth. It is pointed out that large-scale retail organizations are not ousting small shops so far as the number of shops is concerned, but that this is likely to happen in the future through the development of multiple shops in the big towns and co-operative stores in the valleys.

130 pages are devoted to 31 "other industries," which are of far greater

importance in the region than is generally realized.

The unemployment problem of the region is put in terms of a surplus of at least 80,000 workers. If this number of workers were bodily removed from the region there would still remain 12 per cent. unemployment.

The second volume aims at furnishing a background of information on the facilities of the region. General accounts of its natural resources (by Prof. Hubert Cox), and of transport, electricity, gas and water facilities, and labour supply, are followed by brief notes on trading estates, the Special Areas Reconstruction Association, and local rates. The facilities afforded by the rivers, which run fanwise from the Beacons to the sea through the region, are perhaps the greatest inducement to industrialists. It is acknowledged that electricity prices are not exceptionally low and that gas prices on the whole are rather high, partly because of heavy working expenses due to land subsidence and the large number of small undertakings in the mining valleys. It is pointed out that ample male labour can be obtained at any suitable point in the region. The men are not used to factory employment, but are very adaptable and used to action in emergencies. There is a large untapped supply of female labour.

These general accounts are followed by an examination of the region in fourteen area-sections, starting from the Monmouthshire Eastern Valley (the valley of the Afon Llwyd, which joins the Usk at Caerleon, just above Newport) and working westward. Each section contains a brief description of the area concerned as a whole, followed by details of population, industry, sites, communications, gas, water and electricity, rates, etc., for each local authority area within it. The method of treatment is similar throughout, and the Survey manages to give, for each area, an extraordinarily large amount of concise information.

The third volume deals with development, under the heads of labour supply and demand, the location of development, suggested new industries, and the improvement of facilities. Regarding labour supply, the mobility of labour within the region receives special attention. This mobility is shown, from detailed enquiries made, to be very great, many men travelling daily considerable distances from areas which have become virtually dormitories. From the point of view of the industrialist this means that a large labour supply can be assembled at a number of key points in the region. Looking at this question more generally there are obvious social advantages in continuing to live in the village where one formerly worked, but it would

appear to reduce the chances of one's children readily obtaining employment, while it is obviously a waste of time and money. The communities along the Abergavenny-Merthyr road, which are the particularly black spots of the area, are unfortunately the oldest and most deeply rooted, and therefore their inhabitants are more reluctant to move than is the case elsewhere. Besides, as the authors imply in another place, if a great industry is suddenly established in Ebbw Vale, is it not possible that another may come to Rhymney, another to Brynmawr? That, at any rate, is the viewpoint of many of the inhabitants of the towns at the heads of the valleys. The question of labour supply is studied in some detail by groups of Employment Exchange areas; this causes a certain amount of overlapping with the analysis by local authority areas in the second volume, but this seems an inevitable result of the dual system of areas to which the official statistics relate.

It is considered, in conclusion, that some degree of contraction would have occurred anyway in the region, but that it has been so hit by Government policy that a tilting of the balance in its favour is economically justifiable, that sites near the coast would generally be the most suitable for new developments though valley location might be good in certain cases, and that certain towns on the northern edge of the coalfield have at any rate considerable advantages in their great supplies of water, and fairly good transport facilities by road and rail. Suggestions for new industries and suggestions of places where new industries appear most likely to be successful follow from these general considerations. The improvement of facilities is very necessary, however; the authors mention in particular the necessity for a Severn Bridge and the desirability of considering railway electrification. Architects will be particularly interested in the suggestion on pages 324-5 of a scheme of planned holiday resorts.

This Survey is a splendid piece of work, and its plan and execution reflect the greatest credit on those responsible; it is written in a simple and straightforward style, and the reader should not, therefore, be scared by its length. Five maps are included, showing separately collieries and large industrial plants open and closed, local government boundaries, natural features, and railways and roads. The volumes are very well indexed and very well produced. It is, I think, beginning to be realized, by intelligent people of all points of view, that research work of this nature is an essential preliminary to effective action. Let us hope that this Survey is acted on in some visible degree by the Government, for whose

purposes it was primarily undertaken. The distressed areas, and perhaps South Wales in particular, present a great opportunity for economic action—for action in a field where a few failures would readily be forgiven. This Survey ought to reduce the risks of failure considerably.

BUCKS

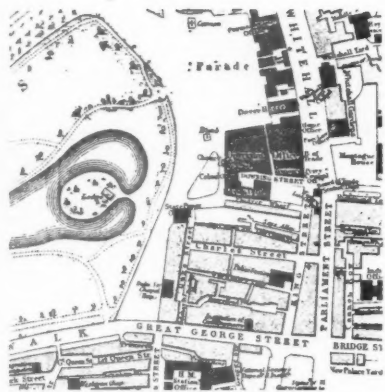
[BY PHILIP SCHOLBERG]

Shell Guide to Buckinghamshire. By John Nash. Batsford. Price 2s. 6d.

"BUCKINGHAMSHIRE is a long and narrow county, and lying as it does across the natural grain of the land, is composed of bands of entirely different types of country." This, the opening sentence of the guide, explains quite clearly the difficulty of writing a coherent account of an area which stops for no reason at an entirely arbitrary county boundary and which, cannot, by any stretch of the imagination, be regarded as a geographical unit. In the South and the North there are the manufacturing horrors of Slough and Wolverton, while, between them are the Chilterns and the Aylesbury Plain: to reconcile them is impossible, but a singularly lucid explanation is given by Mr. Stuart Agrell, who discusses the landscape in terms of geology and justifies not only the beech and mixed woods of the south slope of the Chilterns, but the undulating pasture land, dying a natural death where the chalk breaks through at the foot of the Northern spurs.

As one might expect from the author, the illustrations include a fair number of paintings and there are pencil drawings of various church details by Mr. A. E. Newcombe. Mrs. Esdaile writes with scholarship on church monuments and the alphabetical gazetteer is also liberally sprinkled with her notes. In general, the guide follows the model set by the others in the series and any criticism must depend largely on the omission of personal favourites. In a guide intended for motorists, however, one may be justifiably surprised at the omission of any reference to gliding at Ivinghoe, but prejudice would have liked a note on the Royal Standard of England among the pubs of Beaconsfield and curiosity some further details of the now defunct curled hair industry at Wooburn Green.

Finally, one may note a new type of binding, spiritually akin to Spirax, but having the name printed on the spine, a feature worth having, since there are now no less than ten guides in the series, but there is the corresponding disadvantage that it is no longer possible to fold the guides flat back upon themselves.



LONDON'S PROBLEM A SOLUTION

Extracts from a lecture delivered by Robert Sinclair to the Garden Cities and Town Planning Association, Decentralization Conference, at Digsuwell Park, Welwyn.

I AM not going to talk about town planning, because that is not my line. My activities lie in another field, and I am going to talk about that.

Four years ago I ran away from London, temporarily, to find a little peace. I escaped from the noise, the traffic, the telephones, and the crowds, by finding a little Paradise in this country—no, not Welwyn Garden City—but a wild strip of Carnarvonshire, between the mountains and the sea. . . .

And in that little Paradise, one drowsy afternoon, when my copy of the *Times* arrived, I found something which increased my interest in my little Paradise. It was a long summary of the Annual Report of the Medical Officer of Health for Carnarvonshire. It showed that Carnarvonshire, and particularly my corner, was one of the foulest strongholds of tuberculosis in the country. The figures of the incidence of the disease there were incredible. The medical officer gave a long account, with chapter and verse, of the disgusting conditions in which these people lived in the matter of health. He told how it had been the practice for years to hide a tuberculous member of the family because of the shame in the neighbours' eyes, and how people just died in back rooms so that the prestige of these ignorant cottagers should not be let down.

I did not enjoy my holiday after that, but I shall be grateful all my life for that very striking lesson in the falseness of appearances. It is in my mind tonight, because I have to discuss London. I think the most troubling characteristic of London, one which is vital to the fate of the town-planning idea, is the prevalence of false assumptions about London. These assumptions may be no more than skin deep, but people can't see through the skin.

And that brings me to my point. I want to suggest that the obstacles in the way of constructive town planning at the moment are chiefly concerned with public psychology, and that an ignorance of social realities on the part of the public is at the bottom of that. I want to suggest that you should do something about it, and I want to offer a positive policy. . . .

Significant Facts

In the past months you have had two significant things—the Bus Strike and the Coronation. The Bus Strike was a valuable experiment showing which portions of London can or cannot do with fewer or no buses. The Coronation showed that if you put your foot down and really organized transport you can achieve the queerest things in population movements—and

you can also get into the queerest mess when it rains. . . . Recently the Commissioner of Police, in a striking report, protests that for years to come London will have to be dealt with as it is, and will have to accommodate fast-moving traffic to a city "planned for horses," as he calls it—a great improvement in outlook, coming from an official source. . . . In the past month the Minister of Transport has issued the returns for March, showing that 55,000 new motor vehicles were registered in this country in that one month, a record figure, and that the general increase continues to be 10 or 11 per cent. every year. . . . In the past month the Parliamentary Secretary to the Ministry of Health has computed that 10,000,000 weeks a year are lost to industry from nervous illness. I don't think he included the four weeks' strike of the 25,000 busmen. . . . In the same month, while we are on that point, Lord Horder has reminded the Empire Conference on Tuberculosis, which is mainly an urban disease in spite of Carnarvonshire, that although we are better off than we were, "the tendency to speak of tuberculosis as under control was somewhat of an overstatement." . . .

In the past month we find women delegates from distressed areas protesting in conference against the transfer of children from those areas to such paradises as London, where they embark on great careers as messenger boys instead of remaining to share the shame of their unemployed parents. . . . In the past month, curiously enough, we have seen the report of the Government Committee on Wage-earning Children, which points out that of 8,400 London pageboys and attendants, 7,000 were at work for over 72 hours a week, including meals and breaks, and in some cases worked till midnight, and that much time is apt to be spent, as we knew before, in travel. . . . In the past month a group of scientists have publicly appealed for funds for a new organization, the Population Investigation Committee, which has not been set up till sixty years after the reproduction rate of the English began to fall. Their investigations now may sweep away a few more of the cobwebs that cover social realities. What I should like to see next set up would be a London Investigation Committee to survey all the problems of London. I don't think that is the business of the Garden Cities and Town Planning Association.

Your rôle is different. You offer a remedy for the disease. You are the chemist. But the poor patient has not yet found a doctor who will send him to you. The patient does not even know he is ill.

In the past month, too, Sir Raymond Unwin received the Royal Gold Medal for Architecture, and I learned with a shock that it was the first time the award had been made to a town planner. If that is true, that is a straw in the wind. . . . And last month the public complacency has been shaken by the Coronation disclosures of Mr. Robert Byron—that the London which can't build houses enough for its living citizens, except for those that it builds in the wrong place, is greedily pulling down a number of the few architectural beauties of London to make place for commercial buildings. It is not the pulling down but the protest against the pulling down that is the straw in the wind there. . . .

Things are Moving

These are merely the odd happenings of one month. But things are moving. In isolation these things mean nothing. Taken together, you cannot ignore them. They mean the soil is not unready for the seed you are anxious to sow.

All these things are being helped by physical events to bring matters to a head. The county of London is continuing to lose its residential population year by year; business is moving steadily outward from the centre. The increase of population continues to be enormous.

In the last recorded year Greater London's population increased by 110,000 people. In the past five years the total has risen by nearly

400,000 people. This decade looks as if it will be like the last. Greater London, which had 7 million people before the war, and 8 million at the end of the nineteen-twenties, looks like having 9 millions in the early nineteen-forties—and that's not far away. It went over 8½ millions last year.

Now if people are really becoming more interested in London, more critical of it, we may wonder, what they will find in it. It has many inconveniences. Some in fact are tragic.

It is impossible to give a picture of London in half an hour, or in half a year, but if we think of those aspects of London which don't tend to get into the limelight we can find enough to satisfy us that complacency is very wrong. I won't revert to Sir Malcolm Stewart's complaint that the psychological lure of London upsets the economic and social balance of the country. That has been widely commented on. But you may turn to a lot of little things. The slum housing position, for instance, which many members of the public think to be improving by leaps and bounds so that the day after tomorrow the word slum will disappear from the English language, is far from satisfactory. L.C.C. rehousing in the County of London has succeeded in finding homes up to last year for 10,000 people a year for two years running: this past year the figure may be even higher. It is proposed, I think, to rehouse 250,000 people. But as the special survey last year showed 700,000 people to be living either on the border-line of 1½ persons per room or far below it we look like having inadequate housing for years, and if you read official statements with care you will find that admitted. And remember that 400,000 increase in Greater London's population in the past five years. . . .

Money

You can look at the Londoner's burden in terms of money. One in six employed men in London is engaged in some way in transport. And we know that the financial burden of transport per head of population is heavy merely because so many people are huddled together. The Londoner pays two and a half times as much for policing as the provincial, and that's not because he's a nastier person. You will find that the achievements of health services, which broadly speaking improve as towns increase in size, are not without their exceptions, and sometimes pathetic exceptions. In the last year for which there are full Ministry of Health figures, 1935, you will find the infant mortality rate in half a dozen poor London boroughs greater than say in the Borough of Tyne-mouth, which is a Distressed Area. . . .

The superintendent of atmospheric observations of the Department of Scientific and Industrial Research has estimated that smoke pollution costs London something over £5,000,000 a year, and when we think of the cost of repainting the front of a house we can begin to understand him. Yet that figure is more than the cost of the whole of the voluntary hospitals of Greater London. And these we know are begging for money. Look at King's College last week. The suicide rate in London, much higher than the rest of the country, is another odd thing about congested urban life. . . .

A Method of Approach

Now at this point I would like to suggest both a policy and a method, which I think will have to be patiently embarked on by some body of people if the urban population is to be brought to enjoy the amenities which the town planning movement offers them.

I want to suggest a more deliberate cultivation of a kind of civic philosophy for the general public. . . .

For 40 years the town planning movement has been pegging away in this country. If at the end of those 40 years you buttonhole a number of people in succession in a London street and ask each "What do you think about town

planning?" you can imagine the remarkable answers you would get and the bewilderment you would be faced with. Yet the exploiting of a useful public philosophy has been selling tooth paste in the market place, and has made fortunes for the tooth paste manufacturers greater than any that has flowed through the coffers of the town planning movement.

Many people scoff at propaganda. Propaganda is not everything, but it is half of everything. Propaganda was half of Christianity. It was half of the Great War. It is half of the Garden Cities movement. The other half is those charming towns you have built. So I am treating propaganda without apology, as something important which sometimes tends to be forgotten. There must be 40 million people in this kingdom who have never seen a Garden City. . . .

There is one DIRECT way of selling the idea of Garden Cities to the immense apathetic public of the large old cities. There is a direct and positive way which says, "Garden Cities are wonderful, for reasons *a, b* and *c*." And members of the great city-bound public, each busy with his little daily life, will say enthusiastically, "Yes, wonderful," and turn away and go on with their daily lives. You know that's true because they're still living in London.

Now there is a negative and roundabout way—and this is where I come to the philosophy of cities—a way that was closed to the pioneers, for one thing because they had first to build Garden Cities to show they would work, and for another because the slow mind of the public had not been sufficiently manured.

This method, which I think a positive and effective one in the long run, is to cultivate deliberately a civic interest, not in the Garden Cities which have it already, but in the large old cities. These people have become habituated to their inconvenient life—London would collapse in an hour if they were not—they are so used to it and so immersed in it that they are not self-conscious about it. . . .

London is completely uncritical in a real sense because it knows nothing about itself. Londoners are only able to be critical in a limited personal way. They complain of everything that happens within ten yards of them. They grumble at their own particular bus queue and at the soot which falls in their own garden. As Londoners, as a tightly-bound association, they know nothing of their own association. They know less about London than the Society of Cornishmen in London knows about the Society of Cornishmen in London. . . .

And I would suggest that when you are trying to interest London in itself you should not stress the general and neurotic criticism of London. . . . Interest the townsman in realities.

Facts against Assumptions

If you can correct false complacency by pointing to specific and avoidable ill-health, to specific facts of poverty in relation to the cost of living and transport in large cities, to specific figures of unemployment and of the relief of dependents in relation to uncontrolled migration, to specific facts of mal-housing in constant opposition to those beautiful round figures of the numbers of houses built which you are always reading about—you will be making in my view the greatest and the only effective contribution to the improving of the public's knowledge up to the point where the public will be moved to develop a broad constructive policy of its own towards urban problems. . . .

The minds of people are filled with ideas of a sort about London—assumptions which are often half-truths or even less, assumptions of progress or prosperity or what not, which tend to fill their minds to the exclusion of criticism, and which are all the more difficult to correct in that they are generally based on some degree of truth. But that positive plea that, "Oh! well, things are better than they were" is a

fatal shield which will offer resistance to your attempts to present a picture of urban life which comes close to the realities that matter. So that not only have you something to say, but you have first a false legend to dislodge. It's hard enough to sell your electric cleaner on the doorstep, but it's twice as hard if the woman of the house thinks her old broom is a magic broom that Santa Claus brought down the chimney that morning. We must sweep away the picture of roses round the door to get at the realities inside—not because we like horrid things, but because we hate horrid things.

It is really important to chart the three main illusions that will get in your way at every step. . . .

Three Illusions

The first illusion is the old half-truth of progress. There is plenty of evidence of that. If a man is given to exclaiming, "My goodness, my boys are getting a far better time at school than their old dad!" and if you tell him that there were not enough places in the schools of a town for a number of children who had qualified for those places by examination, he will dismiss something which operates unfairly on the whole lives of some hundreds of children just because he knows something which is true but quite irrelevant—that children generally are getting a better education than they would have got thirty years before. . . .

The second main illusion is that of garbled statistics put forward by people with insufficient experience of that complex subject. They are sometimes so terrified of examining detail that they say, "Oh! you can prove anything by figures." So you can—to a fool. You can prove anything by words, too. You can prove anything by the English alphabet. When it comes to the point, statistics are one of the few methods by which truth in many cases can be tested before being accepted by the intelligent mind. The Bank of England, after all, is run on figures.

I can give you a queer instance of illusion with regard to the London suicide figures which I mentioned just now. You know—you must have noticed—that at the end of the masses of vital statistics which are regularly published it generally says that the suicide rate is 141 per million or something astronomical like that. That certainly gives the impression that suicides are negligible. If I had a million pounds and somebody took £141 of it I should still think myself a millionaire. But that is a very deceptive figure. It is 141 suicide DEATHS per million LIVING. That is rather like saying that for every million blue-eyed people in Scotland one miner was killed in South Wales last year. It would be much more sensible to say that of every thousand miners in South Wales one was killed last year.

You can get at the truth this way. Take all the cemeteries in the county of London and make them into one big cemetery—on Hampstead Heath or somewhere—and build a wall round it with only one gate. Now if you abolish cremation and you stand at that cemetery gate day and night for a year with a little notebook you will check every single death in the county of London by counting the coffins. You will find that in 1935 there were 47,000 coffins—not at all an unusual figure. If you examine doctors and coroners' certificates you will find that about 600 of those coffins are those of suicides—again not a very unusual figure. So already we have something more easy to grasp than the ridiculous 141 per million. We have about 600 suicides out of 47,000 dead—that is six out of 470 or about one in 80. Actually it is one out of 80.6 for 1935. That is still easier—of every mortal man dying in that place in that year, one in 80 takes his own way out. . . .

The third and craziest of your enemies in any policy of realism is the romantic-sentimental school which batters on London as if every stone in that dirty old town were a nugget. It is, to the tourist and hotel and guidebook industry,

but to no one else. The insincerity of the romantic movement is shown by the way in which a number of decent buildings have been quietly destroyed in recent years, with only an occasional bleat from the romantics, and that generally too late. Nothing really radical has been done to preserve the few worthy things. The latest list of threatened places, or places already lost, as made out by Mr. Byron, includes Pembroke House, Whitehall; Abingdon Street, Westminster; All Hallows, Lombard Street; the Adelphi; Sir Joseph Pitt's house in Soho Square; Sir Joshua Reynolds' house in Leicester Square; Kingston House, Kensington Gore, and part of Bedford Square. While tragedy threatens these places the romantics churn out their eternal rhetorical guidebook literature about wonderful London, its magnificent history, the unique city, and all that kind of facile business. . . .

We make a mistake in underestimating the danger of this uncritical commercial glorification of London. As far as your town planning movement is concerned, this building up of a London idolatry is a very serious obstacle to anyone who wants to speak of the rational planning of twentieth-century towns and homes for twentieth-century people. . . .

So if you want to attack London, don't be deterred by those who will call you a vandal. If you fall into that trap of the romantics you will lose your battle. There is no vandalism in pulling down a slum or near-slum, however many roses there are round the door. What we don't want to pull down are the very occasional noble buildings and fine vistas. Few as they are, they are the only thing that makes London different from an overgrown Burslem.

You will also meet the apologist of social *laissez faire* in the form of the people who spread the cult of the cheerful Cockney and his inimitable wit, and who ignore the manifold realities of his toiling life for the sake of making a comic picture and saying "All's well." They forget that the most cheerful people of all and the sharpest witted were those in the trenches twenty years ago—and that wasn't very nice. For that matter Dickens' stories are bursting with good humour—but can you imagine a more cruel world than Dickens' to live in? . . .

Anyway, those of us who are realists have a lot of fighting to do. And while we are fighting let us remember to be precise about the London we are fighting about. . . .

A Positive Attitude

Now that is pretty well the whole of my case. It is going to be difficult to put over the Garden Cities idea as one of positive virtue, right though you may be, before people have got into the habit of looking on their own mode of life in great cities with critical eyes. It is no good abusing London to Londoners as an awful city—not in that general way. As most of them know no other life they won't know what you are talking about. If a modern town planner went into an African village and saw a hut which would not be permitted under the London Building Acts, and said to the chief "I say, that's not so hot," the chief would be insulted. And I daresay Lord Mayors can be like that. But Londoners will be familiar with many *individual* drawbacks of their own lives. The relationship of such things to a common influence must be made apparent and obvious before people will be able to see that there are practical alternatives to living among the inconveniences they endure. In doing that your positive plank will be to press for a fitter capital. You may be afraid that if you do that it may mean a prouder, more impregnable, physically more swollen capital. I don't think it will if you go about your work properly.

We know we can develop in this country a definite outlook, an attitude, on a variety of things—whether it is imperialism, peace or war, or a constitutional or human issue. But perhaps the most dominant thing in this land in

this century, not by moments but continuously, a thing more dominant, I think, than generalised industrialism, is *Urbanism*. Towards that we have no policy, no attitude, not even a consciousness. Urbanism as a thing is difficult to control and is fast moving. What industrial circumstances, for instance, would account for a rise of population of three-quarters of a million people in ten years in one tiny corner of this tiny country? Because it is fast moving it is dangerous, and it is equally dangerous

because among people generally it is almost totally unperceived. And I think that is wrong. And because a common outlook is greater than any garden city, and may be itself the father of garden cities, and because urbanism sits on man to-day like a harness, and influences (where it does not actually determine) the whole of his life, I am asking you to turn back to the old cities. These will be the scene of your triumph, provided you choose to join battle there.

worth using in a really jerky goods lift, but nowhere else, and even then the fuss of buying and storing special lamps for one particular position almost certainly isn't worth while.

Plate Racks

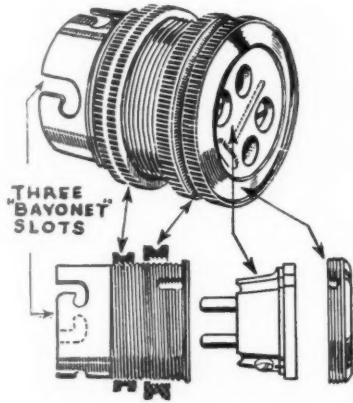
If anybody needs a real luxury plate and cup rack Benhams have got it. The illustration below pretty well explains itself, but it may be added that the racks are made of stainless steel tubes and the plate divisions are covered with white rubber so that there should be no trouble with breakages. Brackets are porcelain enamelled or chromium-plated. Price 18 ins. long, £3 14s., or £2 18s. for the plate rack only without the cup rack below.—(Benham and Sons, Ltd., 66 Wigmore Street, London, W.1.)

Lighting Fittings

Ascog, Ltd., judging from their latest catalogue (*Modern Fittings: catalogue 12*), produce most of the fittings that any reasonable person is likely to want. If you like simple bowls and spheres for ceiling or wall fittings they are all here, but there are also plenty of the fruitier kind that many people associate with super cinemas. But whichever kind you want the prices are reasonable without being startlingly low, and there are also some new fittings with bands of chromium plating on the glass-ware itself, a new departure for anybody who feels like designing special stuff at a not prohibitive cost.—(Ascog, Ltd., 44 Theobald's Road, London, W.C.1.)

Moulded Plywood Panelling

Plywood panelling in sizes up to 92 ins. by 41 ins., with a moulded surface finish, has recently been marketed by James Latham, Ltd., under the name of Oceana panelling. French in origin, the panels can be moulded so that the exposed face is cross-banded, channelled, reeded or fluted as required. So far seven standard sections are available, though other designs could doubtless be produced to special order. But with a judicious use of the standard patterns plenty of variety can be obtained and the price varies from 9d. a square foot (delivered, but not fixed) for 1/4 in. gaboon mahogany to 3s. 3d. for 1/2 in. buff walnut. There are, in all, fifteen different standard veneer facings ranging from plain oak *via* avodire, ash, rosewood, four mahoganies, sycamore, teak and satinwood to two walnuts, enough for almost



TRADE NOTES

[EDITED BY PHILIP SCHOLBERG]

Three-slot Lampholders

NOW that the low-wattage discharge lamps are being produced in some considerable quantities it seems worth while to consider whether the three-slot type of lampholder is not worthy of wider adoption in public buildings of all kinds. For the discharge lamp the three-slot holder is definitely necessary, since a choke coil is essential and the lamp will suffer instant destruction if it is put straight on to the mains supply; there has also been the suggestion that these three-slot lampholders should be used for ordinary incandescent lamps in public buildings or any other places where visitors or employees are likely to remove lamps and use them in their own homes.

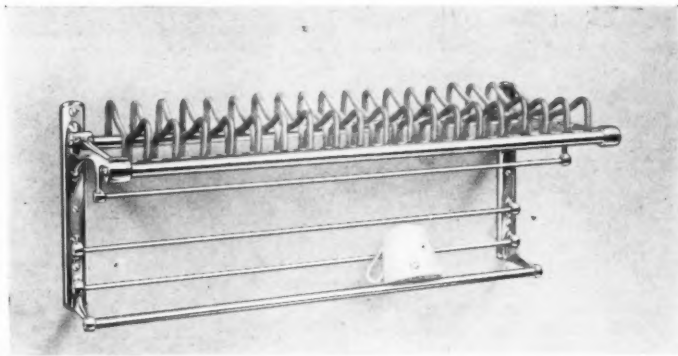
While there is something to be said for this type of holder, the lamp manufacturers are unsympathetic, for they point out, quite justly, that it will only add to the confusion if they produce 3-pin caps for the ordinary lamps, and there are already quite satisfactory locking holders available to prevent pilfering, added to which they also produce the smaller sizes of lamp with the Ediswan screw fitting when necessary. All of which seems pretty fair, for anybody desperate enough to go about stealing 1s. 9d. lamps will probably be quite ready to file extra slots in existing lampholders, whereas the conversion of Ediswan screw to bayonet cap is too much of a job for it to be worth while.

For discharge lamps the three-slot type is now available in most of the standard fittings, and Tuckers have recently added

two more to their range, one an open backed type for use in decorations or signs giving a minimum depth from front to back and allowing for very speedy wiring; there is a sketch of it at the head of these notes.—(J. H. Tucker & Co., Ltd., King's Road, Tyseley, Birmingham.)

Traction Type Lamps

Mention of lampholders brings me to a query received the other day from an architect who wanted to know whether the "Traction" type of incandescent lamp, as supplied to people like London Transport, had any advantages in length of life if used in ordinary buildings. The answer is, No; their life is about the same, but their filaments run at a slightly lower temperature and they are correspondingly less efficient. They might conceivably be



Stainless steel plate rack manufactured by Benham and Sons. (See note on this page.)

anyone to be able to get the effect he wants. Fixing is exactly the same as for ordinary flush panelling.—(James Latham, Ltd., 124 Curtain Road, London, E.C.2.)

Heat from the Power Station

The Earl's Court exhibition building, described in this JOURNAL last week, is heated by thermal storage tanks in three 4,000-kilowatt electrode boilers. Boilers of this type are generally used in the early hours of the morning, for the supply companies nearly all give specially low rates at off-peak periods. The Earl's Court installation, however, embodies a refinement on this method, for the boilers are controlled by the Fulham supply company from their Townmead Road sub-station nearly a mile away. Distant reading thermometers in the sub-station show the water temperature in the Earl's Court storage tanks and the supply company can therefore level out the load at any time, to suit themselves during the day rather than wait for 16,000 horse power or so to come on with a bang in the early hours of the morning—a procedure which would involve quite a hectic time even in the best regulated of sub-stations.

Printing on Tinplate

Does anybody ever get asked to do a bit of package design involving tinplate? If they do, there is an admirable little booklet* which will give them plenty of information in a small space, and as it is published by the tin people themselves it may be taken as being currently accepted practice. The author admits that "any picture or design capable of being printed on paper may also be printed on tinplate," and he regrets that "much of the highest class lithographic work on tinplate has been along the lines of reproductions of work originally intended for the entirely different medium of canvas or paper," and he goes on to suggest that the best designs will be those "expressly intended for reproduction on tinplate."

With all of which every architect will wholeheartedly agree, but most of the booklet is taken up with a description of the various tin-printing processes with notes on such things as inks and varnishes, presented in just the right sort of form for anybody who wants to get as much information as possible in a minimum of time. Manufacturers being what they are, I imagine that most architects won't be very likely to get a chance at this sort of work, but for anybody who is interested in industrial design this is a booklet to write for at once.

Manufacturers' Items

Falk, Stadelmann & Co., Ltd., have issued a new list (No. 726) dealing with a comprehensive range of electrical supplies, covering lighting accessories, cables and flexibles, conduits and fittings.

A Booklet entitled "Metalwork in Alloys of Nickel for Commercial and Public Buildings," has been issued by the Mond Nickel Co., Ltd. This publication is the first of a series

* The Decoration of Tinplate by Printing and Varnishing. By W. E. Hoare, B.Sc. (Distributed free of charge by the International Tin Research and Development Council, Manfield House, 378 Strand, London, W.C.2.)

illustrating the architectural applications of nickel alloys. The principal alloys dealt with are those included in the general term Nickel Silver (sometimes known as "Silver Bronze," "White Metal," etc.), Monel (a white, nickel-copper alloy) and Nickel-Chromium Stainless Steel. Their uses cover such diverse items as decorative metal work, plumbing fittings and kitchen equipment.

The present publication is confined to uses in Commercial and Public Buildings; others in the series will deal with Motion Picture Houses, Theatres, Hospitals, Dwelling Houses and Flats, Swimming Pools, etc.

The Trussed Concrete Steel Co., Ltd., of Horseferry House, Westminster, S.W.1, have produced a special brochure on the floor for factory usage, copies of which may be obtained on application to the Company.

In consequence of an order of the London County Council, Broad Street, Bloomsbury, which has been the address of Charles Turner and Son, Ltd., for the last 116 years, has ceased to exist as a separate street, and is incorporated with High Holborn. The new address is 165 High Holborn, W.C.1.

The Franki Compressed Pile Co., Ltd., have issued a comprehensive booklet.

It is divided into two main parts: the first half describes the technical features and points of superiority of Franki Piling, and the latter half gives useful data concerning actual Franki contracts carried out in all parts of the country.

LAW REPORT

ALLEGED BREACH OF BUILDING REGULATIONS —DEFECTIVE LADDER

Woodman v. Richardson.—Concrete, Ltd. (third parties).—Court of Appeal.—Before Lords Justices Greer, Slesser and Mackinnon

THIS was an appeal by Mr. L. F. Richardson, a builder and contractor, of Mount Ephraim Road, Streatham, from the judgment of Mr. Justice Branson, sitting in the King's Bench Division, awarding the plaintiff, Mr. Richard Charles Woodman, of Dove Road, Shoreditch, £160 damages, with costs, for personal injuries he sustained through the alleged negligence and/or breach of duty of one or other of the defendants, Mr. Richardson, and Concrete, Ltd., of Grand Buildings, Trafalgar Square, W.C.

The material facts were that the plaintiff, a general labourer, on or about September, 1935, was employed by Concrete, Ltd., at the New Theatre, London Road, West Croydon, on certain work in connection with which Mr. Richardson was the head contractor and Concrete, Ltd., sub-contractors. By the contract, Mr. Richardson contracted to supply and did supply the plant to be used on the work and the ladders to be used by Concrete, Ltd., and their employees. Whilst so employed Mr. Woodman on the day in question was descending a ladder when he lost his footing by reason of the fact that rungs were missing from the ladder, and as a consequence of this he alleged that he suffered injury to his left knee causing synovitis and swelling and aggravation of pre-existing arthritis, and shock. His case was that the accident was caused through the defective condition of the ladder, which condition was due to the negligence of or

breach of duty of Mr. Richardson or Concrete, Ltd. He contended that one or the other or both the defendants had been guilty of a breach of statutory duty in using or permitting to be used a ladder with rungs missing or defective, in failing to inspect or providing for the inspection of the ladder adequately or at all, or failing to warn him of the condition of the ladder and failing to fix securely the ladder so that it did not move from its top point of rest. The statutory duty on which Mr. Woodman relied was that imposed by Regulation 29 of the Building Regulations, 1926.

By his defence Mr. Richardson pleaded that Mr. Woodman had been guilty of contributory negligence in walking upon the ladder, which he knew, or could by reasonable and careful observation have seen, if such was the case, that there were missing or defective rungs. Mr. Richardson also pleaded a denial of negligence and/or breach of statutory duty.

Concrete, Ltd., also by their defence pleaded that Mr. Woodman had been guilty of contributory negligence and a denial that the premises where the accident happened were at the material time premises to which the Building Regulations applied. They further denied that the ladder was ever their property or provided by them, or that they had been guilty of any negligence or breach of any statutory duty at all. They admitted that if the regulations applied to the premises Mr. Richardson was guilty of a breach of statutory duty in that he had failed to observe the regulations in respect of the ladder.

Mr. Justice Branson, upon the evidence, found that Mr. Woodman had established negligence against Mr. Richardson, but not against Concrete, Ltd., or that the latter had committed any breach of their statutory duty. He also found that Mr. Woodman had not been guilty of any contributory negligence and gave judgment for him for £160 damages, with costs, against Mr. Richardson, and judgment for Concrete, Ltd., with costs against Mr. Woodman, but ordered that those costs should be paid by Mr. Richardson.

Mr. Gallop now appeared for Mr. Richardson in support of his appeal, and Mr. Macnamara for Mr. Woodman.

At the conclusion of the arguments, the Court, by a majority, allowed the appeal.

Lord Justice Greer, in giving judgment, said there was no evidence as to who it was placed the ladder in position. There was no evidence that Mr. Richardson was guilty of negligence or breach of duty. The duty of putting up the scaffolding lay on Mr. Richardson, and the other defendants, Concrete, Ltd., were to use it. There was no evidence that either of defendants' foremen saw the ladder in position or had any opportunity of seeing it. It was impossible from the evidence to say how long the ladder, before the accident, had been in position. It might have been there only a few minutes. The evidence showed that the defective ladder had been put on a dump, a place from which no employee of the defendants had any right or duty to remove it and put it into use. The plaintiff, to succeed in his action alleging negligence, had to prove his case, and that he had failed to do. He had

failed to give any evidence as to who put up the defective ladder or of any foreman on the job who saw it or ought to have seen its alleged defective state, and ought to have had it removed. The plaintiff's case necessarily failed and the appeal must be allowed and judgment entered for Mr. Richardson, with costs.

Lord Justice Slesser concurred.

Lord Justice MacKinnon dissented, holding that with the evidence given at the trial plaintiff was entitled to succeed and that Mr. Justice Branson's judgment was right.

By a majority of the Court, therefore, the appeal of Mr. Richardson was allowed and judgment entered for him, with costs.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICT (15 miles radius)

BARKING. *Shops, etc.* Plans passed by the Barking Corporation: Eight shops with showrooms above, Longbridge Road, Allworth Shops, Ltd.; 33 houses, Manor Farm Estate, Leftley Bros., Ltd.; 10 houses, Eldred Road, Mr. H. Joseph.

EAST HAM. *Clinic, etc.* East Ham Corporation has obtained sanction to borrow £35,729 for the erection of offices, welfare centre and a school clinic.

FRIERN BARNET. *Houses.* Plans passed by the Friern Barnet U.D.C.: Nine houses, Chandos Avenue, for Messrs. J. D. Rawlins & Co.; 60 houses, Grange Estate, for Mr. L. T. Swanne.

FRIERN BARNET. *Municipal Offices.* Friern Barnet U.D.C. has approved estimates by Sir John Brown, architect, totalling £44,500 for the municipal office scheme.

FRIERN BARNET. *Shops and Flats.* Plans passed by Friern Barnet U.D.C.: 15 flats, Sydney Road, for Messrs. Cramb Bros., Ltd.; seven shops and flats, Colney Hatch Lane, for Messrs. C. Whittaker and Devereux.

MERTON AND MORDEN. *Highways Depot.* Merton and Morden U.D.C. is to construct a highways depot at a cost of £14,550.

TOTTENHAM. *School.* Tottenham Education Committee is to erect a senior school at Rowland Hill at a cost of £49,372.

SOUTHERN COUNTIES

BASINGSTOKE. *School.* Hampshire Education Committee is to erect a secondary school at Basingstoke, at a cost of £26,985.

BERKSHIRE. *School.* Berkshire Education Committee is to provide a new council school for about 320 senior children available for the parishes of Abingdon, Marcham, Garford and Frilford, St. Helen Without, Wootton, Sunningwell and Radley.

BERKSHIRE. *Schools.* Berkshire Education Committee is to reorganize the schools in Hungerford and District, at a cost of £10,200.

BOURNEMOUTH. *Flats, etc.* Plans passed by the Bournemouth Corporation: Shops, offices and flats, Christchurch Road, Messrs. Elcock & Co.; two blocks of flats, Cromwell Hall, Cromwell Road, Mr. G. Howlett.

BOURNEMOUTH. *Isolation hospital.* The Bournemouth Corporation has asked the borough engineer to prepare plans for an isolation hospital with 120 beds at West Howe.

BROCKENHURST. *School.* Hampshire Education Committee has passed a revised estimate of £37,259, for the erection of a secondary school at Brockenhurst.

CROFTON. *School.* Hampshire Education Committee is to provide a school for 360 children at Crofton.

DRY SANDFORD. *School.* Berks Education Committee is to provide a new council school for about 120 junior children at or near Dry Sandford.

KENT. *Sanatorium.* Kent C.C. has approved a scheme for providing a new sanatorium. It is estimated that a sanatorium of 350 beds would cost about £280,000, plus £28,000 for equipment.

PURBROOK PARK. *School.* Hampshire Education Committee is to enlarge Purbrook Park school at a cost of £18,500.

SALTDEAN. *Bungalows.* Mr. R. W. H. Jones, on behalf of the Saltdean Estate Co., Ltd., is to erect 96 bungalows on Saltdean estate, Rottingdean, Brighton.

SHRIVENHAM. *School.* Berks Education Committee is to make provision for a new senior council school for 320 children at Shrivenham.

SURREY. *Central Laundry.* The Surrey C.C. is to erect and equip the Central Laundry at St. Helier Estate, at a cost of £185,750.

TATCHBURY MOUNT COLONY. *Enlargement.* Hampshire C.C. is to enlarge the Tatchbury Mount Colony, at a cost of £50,000.

WARGRAVE. *School.* Berks Education Committee is to erect a senior school at Wargrave, at a cost of £18,787.

WEST SUSSEX. *Farm School.* The West Sussex C.C. is to provide a farm school to accommodate 40 students at an estimated capital cost of £40,000 and an annual net expenditure of £1,500, at Kingsham Farm.

WEYMOUTH. *School.* Weymouth Education Committee is to erect a junior school at Radipole, at a cost of £7,300.

WHITCHURCH. *School.* Hampshire Education Committee is to erect a senior school at Whitchurch, at a cost of £16,489.

EASTERN COUNTIES

OSSETT. *Houses.* Plans passed by Ossett Corporation: 12 houses, Sunnydale Park, Mr. R. Smith.

YARMOUTH. *School.* Yarmouth Education Committee is to erect a junior school at the junction of Caister and Jellicoe Roads.

MIDLAND COUNTIES

ASHFIELD. *School.* The Notts Education Committee has purchased a site at Sutton-in-Ashfield for the erection of a secondary school.

BURBLEM. *Houses.* Plans passed at Burslem: 13 Houses and Tilstone; eight houses, Longport Road, for Messrs. Higginson, Cope and Clews.

COLTON. *Small Holdings.* Staffordshire C.C. is to provide small holdings at Old Wood Farm, Colton, at a cost of £17,285.

CORNHILL. *School.* The Stoke-on-Trent Education Committee is to erect an infants' school at Cornhill at a cost of £10,000.

HARTSHILL. *School.* Warwickshire Education Committee is to erect an infants' school at Hartshill, at a cost of £14,000.

MEIR. *Houses.* Mr. A. Glyn Sherwin, architect, on behalf of Mr. H. Beckett, is to erect 48 houses on a site situate off Caverswall Road, Meir, Staffs.

SOLIHULL. *School.* Warwickshire Education Committee is to erect an elementary school in Lode Lane, Solihull, at a cost of £52,041.

STOURBRIDGE. *School.* Worcestershire Education Committee has accepted the tenders of A. H. Guest, Ltd., £34,524, for the erection of a senior school in Pedmore Road, Stourbridge.

WOLVERHAMPTON. *Hospital.* Wolverhampton Corporation is to enlarge the borough hospital at a cost of £56,710.

WOLVERHAMPTON. *Houses, etc.* Plans passed by Wolverhampton Corporation: 20 houses and four shops, Old Heath Road, Mr. M. A. Boswell; 100 houses, Moreton Estate, Marsh Lane, Mr. E. A. Colman.

NORTHERN COUNTIES

BLACKPOOL. *Swimming Bath.* Blackpool Corporation has accepted the tender of Herbert Joyce and Sons, Ltd., £261,735, for the erection of an indoor swimming bath and remedial baths, on the Pembroke estate.

HULL. *Flats and Shops.* Hull Corporation has approved plans by the City architect for the erection of flats and shops on the William Street area.

HULL. *School.* The Hull Education Committee has approved plans for the erection of a senior girls' school in Priory Road.

LEEDS. *Bus Station.* Leeds Corporation is to proceed with the provision of a bus station, the Ministry of Health having sanctioned a loan of £15,442 for the purpose.

MANCHESTER. *Garage.* The Manchester Corporation is to erect a garage in Belle Vue Street, Gorton, at a cost of £12,500.

MIDDLESBROUGH. *Fire Station.* Middlesbrough Corporation is to erect a fire station, at a cost of £35,582.

MORECAMBE. *Houses.* Plans passed by Morecambe Corporation: 36 houses, Brendjean-Road, Mr. A. Whitehead; 14 houses, Combermere Road, Mr. W. E. Brown.

MORECAMBE. *Fire Station.* Morecambe Corporation has accepted the tender of Messrs. Edmondson Bros. (Morecambe), Ltd., £15,250, for the erection of a fire station.

OLDBURY. *Houses.* The Oldbury Corporation is to erect 30 houses at Walton Road on the Bleakhouse estate.

STRETFORD. *Houses.* Plans passed by Stretford Corporation: 206 houses, Selby Road, etc.

SUTTON COLDFIELD. *Houses, etc.* Plans passed by the Sutton Coldfield Corporation: 11 houses, Darnick Road, R. W. Stanton, Ltd.; 20 houses, Halton Road, Alton Estates, Ltd.; 78 houses, off Kings Road, Mr. W. H. Heeley; factory, Kingsbury Road, Light Alloy Co.; 18 houses, Orton Road, Mr. H. Skinner.

TURTON. *School.* The Lancashire Education Committee is to erect an elementary school for 500 at Turton.

WALLSEND. *Houses.* Wallsend Corporation recommends an arrangement with the North Eastern Housing Association, Ltd., which is erecting 150 houses for the Corporation, for building another 250 to complete the scheme for rehousing displaced tenants.

YORK. *Houses, etc.* Plans passed by the York Corporation: 16 houses, Broadway, Mr. T. Gledhill; cinema, Hull Road, Mr. R. Sherry; eight houses, Penyghent Avenue, Mr. R. A. Cattle.

YORK. *Labour Exchange.* H.M. Office of Works is to erect a Labour Exchange and Inland Revenue Office at Piccadilly, York.

SCOTLAND

GLASGOW. *Houses.* Glasgow Corporation is to erect 206 houses at Huntershill.

THE BUILDINGS ILLUSTRATED

GAS LIGHT AND COKE CO., SHOWROOMS, LEYTONSTONE (pages 291-294).—The general contractors were, The Demolition and Construction Co. The principal sub-contractors and suppliers included: Moreland Hayne & Co., steelwork; Overhead, Limited, electrical installation; T. Potterton & Co., heating; G. N. Haden & Co., ventilating; Crittall Manufacturing Co., metal windows; Fenning & Co., granite; G. Jackson and Son, fibrous plaster; J. L. Green and Vardy, Ltd., doors and some hardwoods; Diespeker, Ltd., floors; Cellacite and British Uralite, ceiling panels; Taylor Pearce & Co., door furniture; George Jennings, sanitary fittings; F. A. Norris & Co., shutters; Cox & Co., cinema seating; A. Johnson and Co., stainless steel sink; R. F. Hunter, cinema screen; Stanley Jones & Co., shop front; George Parnall & Co., counter grille; Cellulin, Ltd., celluline flooring, carpets, curtain, etc.

CURRENT PRICES

The wages are the standard Union rates of wages payable in London at the time of publication. The prices given below are for materials of good quality and include delivery to site in Central London area, unless otherwise stated. For delivery outside this area, adjust-

ment should be made for the cost of transport. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry. The whole of the information given is copyright.

WAGES

	per hour	per week
Bricklayer	1 8	2 10
Carpenter	1 8	2 10
Joiner	1 8	2 10
Machinist	1 9	2 10
Mason (Banker)	1 8	2 10
(Fixer)	1 8	2 10
Plumber	1 8	2 10
Painter	1 7	2 10
Paperhanger	1 7	2 10
Glazier	1 8	2 10
Slater	1 8	2 10
Scaffolder	1 4	2 10
Timberman	1 4	2 10
Navy	1 3	2 10
General Labourer	1 3	2 10
Lorryman	1 6	2 10
Crane Driver	1 7	2 10
Watchman	1 0	2 10

MATERIALS

EXCAVATOR AND CONCRETOR

	per ton
Grey Stone Lime	2 0
Blue Lias Lime	1 8
Hydrated Lime	2 5
Portland Cement, in 4-ton lots (d/d site, including Paper Bags)	1 19
Rapid Hardening Cement, in 4-ton lots (d/d site, including Paper Bags)	2 5
White Portland Cement, in 1-ton lots	8 15
Thames Ballast	7 0
Crushed Ballast	7 0
Building Sand	8 6
Washed Sand	8 0
2" Broken Brick	10 3
Pan Breeze	6 6
Coke Breeze	8 9

DRAINLAYER

BEST STONWARE DRAIN PIPES AND FITTINGS	
	per F.R.
Straight Pipes	0 9
Bends	1 9
Taper Bends	3 6
Rest Bends	4 3
Single Junctions	3 6
Double	4 9
Straight channels	1 6
1" Channel bends	2 9
Channel junctions	4 6
Channel tapers	2 9
Yard gullies	6 9
Interceptors	16 0
IRON DRAINS	
Iron drain pipe	2 3
Bends	6 4
Inspection bends	11 5
Single junctions	11 2
Double junctions	17 2
Lead Wool	6
Gaskin	5

BRICKLAYER

	per M.
Flettons	2 12
Grooved do.	2 14
Phorpres bricks	2 15
Cellular bricks	2 15
Stocks, 1st quality	4 11
2nd	4 2
Blue Bricks, Pressed	8 14
Wirecuts	7 12
Brindles	7 0
Bullnose	9 0
Red Sand-faced Facings	6 18
Red Rubbers for Arches	12 0
Multicoloured Facings	7 10
Luton Facings	7 10
Phorpres White Facings	3 17
Rustic Facings	3 12
Midhurst White Facings	5 0
Glazed Bricks, Ivory, White or Safe glazed, 1st quality:	
Stretchers	21 0
Headers	20 10
Bullnose	27 10
Double Stretchers	29 10
Double Headers	26 10
Glazed Second Quality, Less	1 0
Buff and Creams, Add	2 0
Other Colours	5 10
2" Breeze Partition Blocks	1 7
3" "	1 10
4" "	2 1
5" "	2 6

MASON

	per F.C.
Portland stone, Whitbed	4 4
" Basebed	4 7
Bath stone	2 10
York stone	6 6
Sawn templates	7 6
Paving, 2"	1 8
" 3"	2 6

SLATER AND TILER

	per M.
First quality Bangor or Portmadoc slates	
d/d F.O.R. London station:	
24" x 12" Duchesses	28 17
22" x 12" Marchionesses	24 10
20" x 10" Countesses	19 5
18" x 10" Viscountesses	15 10
18" x 9" Ladies	13 17
Westmorland green (random sizes)	8 10
Old Delabole slates d/d in full truck	
loads to Nine Elms Station:	
20" x 10" medium grey	21 11
" green	24 7
Best machine roofing tiles	4 5
Best hand-made do.	4 17
Hips and valleys	9
hand-made	9 1/2
Nails, compo.	1 4
copper	1 5

CARPENTER AND JOINER

	per F.C.
Good carcassing timber	2 2
Birch	9
Deal, Joiner's	5
2nds	4
Mahogany, Honduras	1 3
African	1 1
Cuban	2 6
Oak, plain American	1 0
Figured	1 3
plain Japanese	1 2
Figured	1 5
Austrian wainscot	1 6
English	1 11
Pine, Yellow	1 0
Oregon	4
British Columbian	4
Teak, Moulmein	1 3
Burma	1 2
Walnut, American	2 3
French	2 3
Whitewood, American	1 1
Deal floorings	18 6
" "	1 6
" "	1 2
" "	1 5
" "	1 10
Deal matchings	14 3
" "	15 6
" "	1 4
Rough boarding	16 0
" "	18 0
" "	1 6
Plywood, per ft. sup.:	
Thickness	
Qualities	A B BB
Birch 60 x 48	4 2 2 5 3 2 7 5 4 8 6 5
Cheap Alder	2 1 2 3 2 2 4 3 2 5 4 8
Oregon Pine	2 1 2 3 2 2 4 3 2 5 4 8
Gaboon	4 3 1/2 5 4 1/2 7 1/2 8 1/2 10 8 11 9
Mahogany	4 3 1/2 5 4 1/2 7 1/2 8 1/2 10 8 11 9
Figured Oak	6 1/2 5 7 1/2 8 1/2 10 8 11 9
Scotch glue	lb 8

SMITH AND FOUNDER

TUBES		FITTINGS	
Gas	Galvanized gas	Gas	Galvanized gas
Water	56 1/2	Water	48 1/2
Steam	51 1/2	Water	46 1/2
	46 1/2	Steam	41 1/2
		Water	48 1/2
		Water	57 1/2
		Water	53 1/2
		Steam	48 1/2
		Gas	48 1/2
		Water	48 1/2
		Water	57 1/2
		Water	53 1/2
		Steam	48 1/2
		Gas	48 1/2
		Water	57 1/2
		Water	53 1/2
		Steam	48 1/2

SMITH AND FOUNDER—continued

	per cwt.
Mild steel reinforcing rods, 1/2"	15 3
" " " " 3/4"	15 3
" " " " 1"	15 3
" " " " 1 1/4"	15 3
" " " " 1 1/2"	15 3
Cast-iron rain-water pipes of ordinary thickness metal	8 10
Shoes	2 0
Anti-splash shoes	4 6
Boots	3 0
Bends	2 7
with access door	6 3
Heads	4 0
Swan-necks up to 9" offsets	3 9
Plinth bends, 4 1/2" to 6"	3 9
Half-ordinary rain-water gutters of ordinary thickness metal	5 6
Stop ends	6 6
Angles	1 7
Obtuse angles	2 0
Outlets	1 9

PLUMBER

	per cwt.
Lead, milled sheets	33 6
drawn pipes	33 0
soil pipes	36 0
scrap	21 0
Solder, plumbers'	1 1
fine do.	1 4
Copper, sheet	1 0
tubes	1 2
L.C.C. soil and waste pipes:	
Plain cast	1 0
Coated	1 1
Galvanized	2 0
Holderbats	3 10
Bends	3 9
Shoes	2 10
Heads	4 8

PLASTERER

	per ton
Lime, chalk	2 10
Plaster, coarse	4 7
fine	3 0
Hydrated lime	3 6
Sirapite	5 0
Keene's cement	3 6
Gothite plaster	3 6
Pioneer plaster	3 6
Thistle plaster	3 6
Sand, washed	11 6
Hair	1 6
Laths, sawn	3 4
rent	3 9
Lath nails	3

GLAZIER

	per sq. ft.
Sheet glass, 24 oz., squares n/e 2 ft. s. F.S.	2 1/2
26 oz.	3 1/2
Flemish, Arctic, Figures (white)	7 1/2
Beeded: Cross Beeded	2 6
Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite	6
Crown sheet glass (n/e 12" x 10")	3 0
Flushed opals (white and coloured)	1 0 and 2 0
1/2" rough cast; rolled plate	6
1/2" wired cast; wired rolled	10 1/2
1/2" Georgian wired cast	11 1/2
1/2" Polished plate, n/e 1 ft.	11 1/2
" " 2	11 1/2
" " 4	12 3/4
" " 8	12 9
" " 10	13 1
" " 100	13 3
Vita glass, sheet, n/e 1 ft.	14 0
" " over 2 ft.	1 3
" " plate, n/e 1 ft.	1 9
" " 2 ft.	1 6
" " 5 ft.	3 0
" " 7 ft.	4 0
" " 15 ft.	6 0
" " over 15 ft.	7 6
" " Calorex sheet 21 oz., and 32 oz.	2 6 and 3 6
rough cast 1/2" and 1"	8 1/2, 1 0
Putty, linseed oil	3

PAINTER

	per cwt.
White lead in 1-cwt. casks	2 17 9
Linseed oil	3 2
Boiled oil	3 5
Turpentine	3 9
Patent knocking	14 0
Distemper, washable ordinary	2 6 0
Whitening	4 0
Size, double	3 0
Copal varnish	13 0
Flat varnish	14 0
Outside varnish	13 0
White enamel	13 6
Ready mixed paint	13 6
Brunswick black	7 6

CURRENT PRICES FOR MEASURED WORK

The following prices are for work to new buildings of average size, executed under normal conditions in the London area. They include establishment charges and

profit. While every care has been taken in its compilation, no responsibility can be accepted for the accuracy of the list. The whole of the information given is copyright.

EXCAVATOR AND CONCRETOR

Digging over surface n/e 12" deep and cart away	Y.S.	s. d.	2 9
" to reduce levels n/e 5' 0" deep and cart away	Y.C.	8 6	
" to form basement n/e 5' 0" and cart away	"	9 0	
" " " 10' 0" deep and cart away	"	9 6	
" " " 15' 0" deep and cart away	"	10 0	
If in stiff clay	add	4 0	
If in underpinning	"	10 0	
Planking and strutting to sides of excavation	F.S.	1 0	
" " to pier holes	"	5	
" " to trenches	"	5	
" " extra, only if left in	"	3	
Hardcore, filled in and rammed	Y.C.	10 8	
Portland cement concrete in foundations (6-1)	I 6 0		
" " (4-2-1)	I 12 6		
" " underpinning	I 16 0		
Finishing surface of concrete, space face	Y.S.	7	

DRAINLAYER

Stoneware drains, laid complete (digging and concrete to be priced separately)	F.R.	I 6 2 3
Extra, only for bends	Each	2 8 3 0
" " junctions	"	3 9 4 6
Gullies and gratings	"	16 6 18 0
Cast iron drains, and laying and jointing	F.R.	5 9 8 3
Extra, only for bends (cast iron)	Each	12 3 18 4

BRICKLAYER

Brickwork, Flettons in lime mortar	Per Rod	£ s. d.	26 10 0
" " in cement	"	27 12 6	
" " Stocks in cement	"	34 0 0	
" " Blues in cement	"	50 0 0	
Extra only for circular on plan	"	1 10 0	
" " backing to masonry	"	2 0 0	
" " rising on old walls	"	5 10 0	
" " underpinning	"	12 12 6	
Fair Face and pointing internally	F.S.	12 12 6	
Extra over fletton brickwork for picked stock facings and pointing	"	11	
" " " red brick facings and pointing	"	1 4	
" " " blue brick facings and pointing	"	3 6	
" " " glazed brick facings and pointing	"	7 4	
Tuck pointing	"	3	
Weather pointing in cement	"	10	
Slate dampcourse	"	1 1	
Vertical dampcourse	"	1 1	

ASPHALTER

1" Horizontal dampcourse	Y.S.	s. d.	4 9
1" Vertical dampcourse	"	3 7	
1" paving or flat	"	6 3	
1" paving on flat	"	7 6	
1" x 6" skirting	F.R.	1 0	
Angle fillet	"	2 4	
Rounded angle	"	2 6	
Cesspools	Each	5 6	

MASON

Portland stone, including all labour, hoisting, fixing and cleaning down, complete	F.C.	£ s. d.	17 9
Bath stone and do, all as last	"	13 6	
Artificial stone and do.	"	13 0	
York stone templates, fixed complete	"	10 6	
" " thresholds	"	13 6	
" " sills	"	1 0 5	

SLATER AND TILER

Slating, Bangor or equal to a 3" lap, and fixing with compo nails, 20" x 10"	Sqr.	£ s. d.	3 10 0
Do, 18" x 9"	"	3 7 0	
Do, 24" x 12"	"	3 17 0	
Westmorland slating, laid with diminished courses	"	6 0 0	
Tiling, best hand-made sand-faced, laid to a 4" gauge, nailed every fourth course	"	3 0 0	
Do, all as last, but of machine-made tiles	"	2 16 0	
20" x 10" medium Old Delabole slating, laid to a 3" lap (grey)	"	2 16 0	
" " " " " " (green)	"	4 15 0	

CARPENTER AND JOINER

Flat boarded centering to concrete floors, including all strutting	Sqr.	£ s. d.	2 2 6
Shuttering to sides and soffits of beams	F.S.	7	
" " to stanchions	"	7	
" " to staircases	"	1 6	
Fir and fixing in wall plates, lintols, etc.	F.C.	3 9	
Fir framed in floors	"	4 6	
" " roofs	"	6 6	
" " trusses	"	7 6	
" " partitions	"	8 6	
1" deal sawn boarding and fixing to joists	Sqr.	1 14 6	
1 1/2" " " " " " "	"	1 17 6	
1 1/2" x 2" fir battening for Countess slating	"	2 3 0	
Do, for 4" gauge tiling	"	9 6	
Stout feather-edged tilting fillet	F.R.	12 0	
Patent inodorous felt, 1 ply	Y.S.	2 3	
" " " 2	"	2 9	
" " " 3	"	3 3	
Stout herringbone strutting to 9" joists	F.R.	10 4	
1" deal gutter boards and bearers	F.S.	1 2	
1 1/2" deal wrought rounded roll	F.R.	1 6	
1" deal grooved and tongued flooring, laid complete, including cleaning off	Sqr.	2 1 0	
1 1/2" do.	"	2 10 0	
1 1/2" do.	"	2 17 0	
1" deal moulded skirting fixed on, and including grounds plugged to wall	F.S.	1 5	
1 1/2" do.	"	1 9	

CARPENTER AND JOINER—continued

1 1/2" deal moulded sashes of average size	F.S.	s. d.	1 0 1/2
2" " " " " " "	"	1 11 1/2	
1 1/2" deal cased frames double hung, of 6" x 3" oak sills, 1 1/2" pulley stiles, 1 1/2" heads, 1" inside and outside linings, 1/2" parting beads, and with brass faced axle pulleys, etc., fixed complete	"	3 7	
Extra only for moulded horns	Each	3 10	
1 1/2" deal four-panel square, both sides, door	F.S.	2 0	
2" " " " " " "	"	2 8	
1 1/2" " " but moulded both sides	"	2 4	
4" x 3" deal, rebated and moulded frames	F.R.	3 0	
4 1/2" x 3 1/2" " " " " " "	"	1 0	
1 1/2" deal tongued and moulded window board, on and including deal bearers	F.S.	1 4	
1 1/2" deal treads, 1" risers in staircases, and tongued and grooved together on and including strong fir carriages	"	1 9	
1 1/2" deal moulded wall strings	"	2 6	
1 1/2" " " outer strings	"	2 1	
Ends of treads and risers housed to string	Each	2 4	
3" x 2" deal moulded handrail	F.R.	1 9	
1" x 1" deal balusters and housing each end	Each	1 3	
1 1/2" x 1 1/2" " " " " " "	"	2 0	
3" x 3" deal wrought framed newels	F.R.	2 9	
Extra only for newel caps	Each	1 3	
Do., pendants	"	6 0	

SMITH AND FOUNDER

Rolled steel joists, cut to length, and hoisting and fixing in position	Per cwt.	s. d.	18 6
Riveted plate or compound girders, and hoisting and fixing in position	"	1 3 0	
Do., stanchions with riveted caps and bases and do.	"	1 2 0	
Mild steel bar reinforcement, 1" and up, bent and fixed complete	"	1 2 0	
Corrugated iron sheeting fixed to wood framing, including all bolts and nuts 20 g.	F.S.	11	
Wrot-iron caulked and cambered chimney bars	Per cwt.	1 10 0	

PLUMBER

Milled lead and labour in flats	cwt.	£ s. d.	4 0
Do. in flashings	"	2 7 6	
Do. in coverings to turrets	"	2 13 0	
Do. in soakers	"	1 18 9	
Labour to welted edge	F.R.	3 4	
Open copper nailing	"	3	
Close " "	"	4	
Lead service pipe and fixing with pipe hooks	F.R.	s. d. s. d. s. d. s. d. s. d. s. d.	
Do. soil pipe and fixing with cast lead tacks	"	1 2 1 4 1 8 1/2 2 7 3 6	
Extra, only to bends	Each	— — — — — 7 3	
Do. to stop ends	"	5 1/2 8 9 11 1 0	
Boiler screws and unions	"	3 3 3 9 5 8 0 11 6	
Lead traps	"	— — — — —	
Screw down bib valves	"	6 9 9 6 11 0	
Do. stop cocks	"	7 0 9 6 12 6	
4" cast-iron 1/2-rd. gutter and fixing	F.R.	1 0	
Extra, only stop ends	Each	1 0	
Do. angles	"	1 6	
Do. outlets	"	2 9	
4" dia. cast-iron rain-water pipe and fixing with ears cast on	F.R.	1 2	
Extra, only for shoes	Each	1 3	
Do. for plain heads	"	5 6	

PLASTER AND TILING

Expanded metal lathing, small mesh	Y.S.	s. d.	2 0
Do. in n/w to beams, stanchions, etc.	"	2 9	
Lathing with sawn laths to ceilings	"	1 3	
1/2" screeding in Portland cement and sand or tiling, wood block floor, etc.	"	1 5	
Do. vertical	"	1 7	
Rough under on walls	"	1 2 1/2	
Render, redset and set in lime and hair	"	1 9	
Render and set in Sirapite	"	1 11	
Render backing in cement and sand, and set in Keene's cement	"	2 9	
Extra, only if on lathing	"	4	
Keene's cement angle and arris	F.R.	6	
Arris	"	1 1/2	
Rounded angle, small	"	3	
Plain cornices in plaster, including dubbing out, per 1" girth	"	1 1/2	
1" granolithic pavings	Y.S.	3 6	
6" x 6" white glazed wall tiling and fixing on prepared screed	"	17 6	
9" x 3" " " " " " "	"	1 2 6	
Extra, only for small quadrant angle	F.R.	8	

GLAZIER

21 oz. sheet glass and glazing with putty	F.S.	s. d.	6 1/2
26 oz. do. and do.	"	7 1/2	
Flemish, Arctic Figured (white) and glazing with putty	"	1 1	
Cathedral glass and do.	"	1 2	
Glazing only, British polished plate	"	7	
Extra, only if in beds	"	2	
Washleather	F.R.	4	

PAINTER

Clearcolle and whiten ceilings	Y.S.	s. d.	6
Do. and distemper walls	"	9	
Do. with washable distemper	"	1 1	
Knot, stop, prime and paint four coats of oil colour on plain surfaces	"	3 3	
Do. on woodwork	"	3 0	
Do. on steelwork	"	3 6	
Do. and brush grain and twice varnish	"	5 6	
Stain and twice varnish woodwork	"	1 11	
Stain and wax polish woodwork	"	4 6	
French polishing	F.S.	1 2	
Stripping off old paper	Piece	2 0	
Hanging ordinary paper	from	2 9	