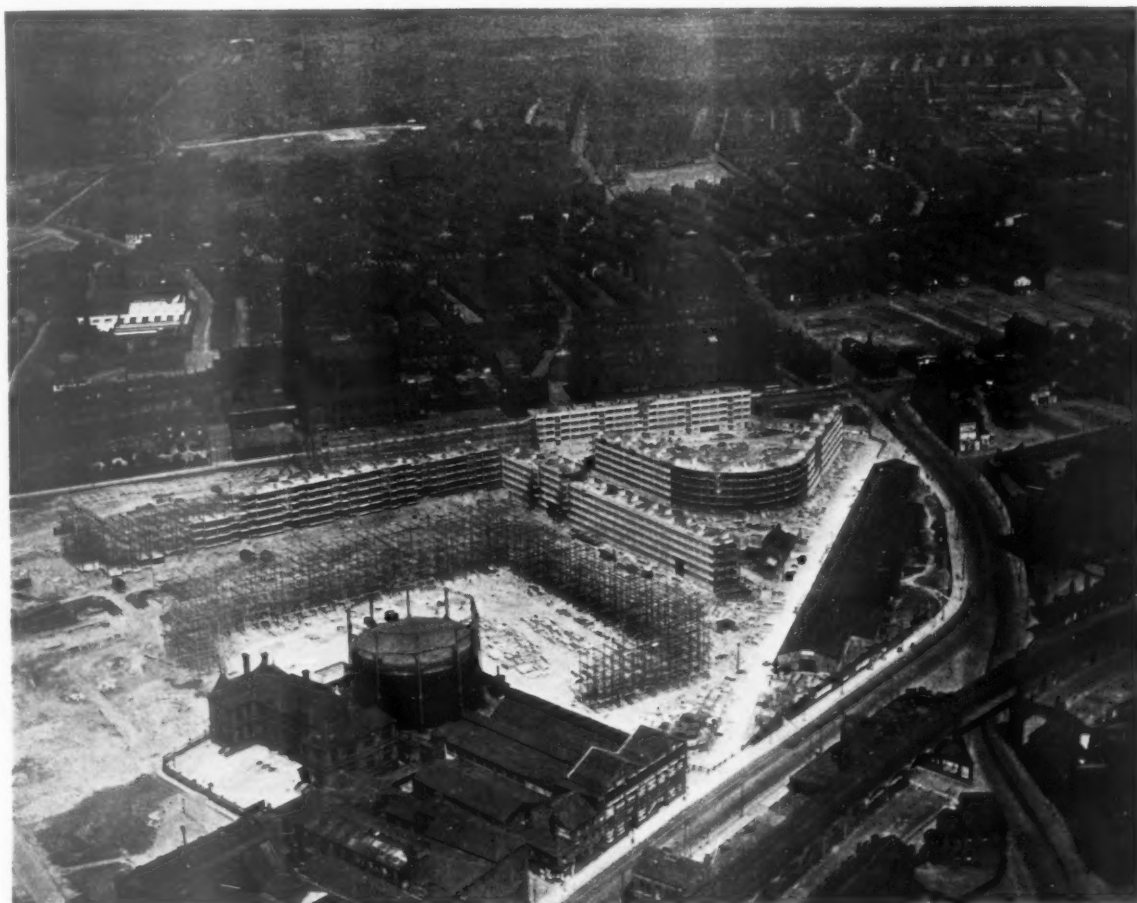


FLATS UNDER CONSTRUCTION AT LEEDS



An aerial view, from the south-west, of the scheme for 938 flats, now under construction at Quarry Hill, Leeds. The architect is Mr. R. H. Livett, Director of Housing.



REPAIRING THE ACROPOLIS

After the completion of repairs to the Parthenon work is continuing on the Acropolis. Above, a cradle in use on the North Colonnade, missing and defective stones being replaced in Pentelic marble from the original quarries. Left, the North Colonnade completed, the new marble in the architrave and capitals showing white.



KNOWING WHERE TO STOP

THE length of the silly season for the daily press has been shorter than usual. There has been no playing for time until the Law Courts, autumn events and, at last, the Commons have started to make decisions and sensations that are worth space. An outbreak of a new war, new events in what now seems an old one, and the wider effects of both have filled the papers with things that matter a lot.

For most of those who live in Great Britain, however, these happenings only matter a lot in their possibilities. At home prosperity is continuing, unemployment falling as low as we have begun to expect that it can fall, and the coming slump, if come it must, at least looks a year and more away.

It is, for the moment, a cheerful outlook in Britain. And all these wars in foreign parts, so difficult to understand, are suspected of being part of fantastic and almost permanent silly seasons which other countries tolerate either because they like them or because they are not sufficiently civilized to avoid them.

The sensible Briton knows the place of a silly season. He may be amused by its products, he may even tolerate considerable licence—as long as it is understood to be only a paper game.

But the contradictory and sensational must not get out of hand. Serious things like earning a living and freedom of private initiative are not subjects for news stunts; they are regulated and improved by the grave, steady processes of British democratic government. To suggest that some improvements need immediate attention is foolishly extreme; to suggest that bad methods of regulation create their own vested interests is dangerously near Bolshevism; and no one save a madman or a foreigner can possibly see anything fantastic in British solutions to some modern problems.

The healthy absence of the ruthless and the efficiency of the constant British compromise between the public need and private freedom of action is illustrated by several events in the past year. Among them the solutions advocated and the measures being adopted concerning air raid precautions, the special areas and road traffic are good examples.

Air raid precautions are of unquestionable importance, and offensive and defensive measures are now being intensively studied; but of all the sections of this subject the size of London is the greatest. And it was early advocated that in a time of emergency large areas of Greater London might be evacuated.

Almost simultaneously the first Commissioner for the Special Areas listed other undesirable aspects of London's size. He stressed its unbalancing effect on the nation's industries, its drain of ability from other

areas, the wear and tear on workers actually living there; and recommended most urgently that new industries should be discouraged from starting in the Home Counties.

Well-supported recommendations from two such points of view naturally produced an effect. The Government presumably considered them carefully and took appropriate action. The result of the consequent compromise between the need for some industrial redistribution and the private views of individual factory owners is shown in the Board of Trade's returns of new factories opened last year. Out of a grand total of 551, 261 were in Greater London.

The success of British methods in dealing with the problem of road traffic in the best interests of the country have been, perhaps, even more considerable still. Road accidents have, it is true, increased, but no one can possibly reckon what the total of casualties would have been but for the astounding energy of the former Minister of Transport and his advisors. Under them the principle that roads fell into two classes was thoroughly applied. Roads were held to be either access ways for pedestrians and very slow speed traffic to and from houses, shops and so on—or high speed motor ways on which other kinds of moving objects were discouraged.

This principle, moreover, was not put into force with the fantastic disregard for private feelings and property which is sometimes seen in other countries. Local authorities, local interests, local property owners and inhabitants were all consulted and their wishes met in almost all cases. Sometimes the new high speed use of a road, with suitable modifications, was imposed on an old access road. Sometimes the new high-speed roads were thrown open to everyone who wished to build houses, schools or shops along it and to use it to get to them. But whatever happened the two uses were always combined, frequently with the greatest ingenuity, cunning and unexpectedness and almost universally with a large increase in the accident rate for the neighbourhood.

These examples of the British seriousness of purpose over serious things could be increased—but over-emphasis has never been a national failing. They seem to illustrate that this country is unlikely to be flurried by modern progress or to be deflected from the sensible conduct of everyday affairs by grandiose schemes for questionable future improvements. And even if such things ever do become unavoidable we can be certain that in their execution the rights of everyone concerned will be scrupulously respected.



The Architects' Journal

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NOTES & TOPICS

S.S. "ORCADES"

IT is two years since the Orient Line flung overboard conventional ideas of ship decoration and in S.S. "Orion" introduced the architect into a field of design which had come to be monopolized by the "period" decorator.

Now "Orion" has been followed by a sister ship "Orcaades." Mr. Brian O'Rorke is again the architect, and he has conformed fairly closely to the standards which he established in the "Orion." Comparisons, proverbially odious, would be particularly so in the case of comparing the pioneer example of "Orion" with what has become an accepted standard in the "Orcaades"; but in general there is noticeable a greater use of the structure of the ship to decorative ends with, I think, a corresponding gain in architectural quality. This, probably for reasons of economy, is particularly noticeable in the tourist accommodation.

Technical improvements include a wider spacing of stanchions on the promenade deck, which give the less obstructed view which is important in a cruising liner, and a pioneer use of air-conditioning in selected sitting- and state-rooms.

It is a remarkable reflection on the way in which considerations of period "luxury" have hitherto been allowed to over-ride those of practical "comfort" that the library of the "Orcaades" is the first public sitting-room on a British ship trading on the Suez route to be provided with conditioned air.

The innovation introduced in the "Orion" of employing a single architect to control the interior decoration is becoming an increasingly widely accepted practice. The task of sustaining the decorative glamour of the "Queen Mary" in her new sister ship 552 must be an exacting one

for any architect, and I am not surprised to read in a contemporary that "Mr. Grey Wornum, to whom the owners have entrusted the whole of the interior decoration, has gone off to Sweden in search of more ideas."

PITHEAD BATHS

It was, literally, in a thick cloud, high up on what I imagined to be a lonely moor, that there suddenly loomed up in front of me an extraordinarily comely piece of modernism. It was strange, in that mist, to find oneself looking at the familiar details of sophisticated modern practice—good chromium lettering, plymax, etc. It was, I discovered with a good deal of difficulty, the Pennyvenie Colliery Baths, Ayrshire.

Everybody who has regarded the appalling domestic problems of mining villages as insoluble should read the fifteenth annual report of the Miners' Welfare Committee (Stationery Office, 1s. 6d.) which is a full account of an extremely fine piece of work. So far the Fund, since its inception, has totalled nearly sixteen million pounds, and nearly the whole of this sum has been spent on welfare of some sort. Recreation grounds and playgrounds have been provided, and by 1944 it is thought that every miner in the industry will have the use of a pit-head bath.

As we all know, the standard of design for these pithead baths is extraordinarily high. Perhaps few of us realize how much partial washing in tin tubs in crowded kitchens, how much filth on bedclothes and how much drudgery generally is saved not only to the men but to their wives too. There are other aspects of the work which make the report worth buying.

EARL'S COURT

The new exhibition hall at Earl's Court was advertised in one of last Monday's evening newspapers as being the largest building in the world. I can well believe it. Actually, however, I should imagine that it would be rather a difficult claim to substantiate. A fact of this sort has, I suppose, some sort of publicity value, but it is one of those quite meaningless bits of information of which Mr. Arthur Mee must have kept such a vast stock for use in the pages of the *Children's Encyclopedia*.

Anyway, how do you measure a building for this purpose—total area, unbroken floor area, height, cubic capacity—or what? On height Earl's Court is obviously out of it; on cubic capacity it must be nearer the mark, but I should like to have the official figures to compare with the soaring towers of Rockefeller Centre. Earl's Court's chief claim is, presumably, on area, but, even if we give it the benefit of all doubts and assume that it covers the whole of its 12-acre site, it still has only 522,720 square feet to put against the 990,000 of King Sargon's Palace at Khorsabad. The Temple of Ammon (exclusive of its surrounding courts), the Escorial and the Colosseum are "also rans."

How little there is in bigness, after all. The Armada was planned in the Escorial and Mr. Gladstone proposed



Exterior and interior views of the London Passenger Transport Board's experimental streamlined train.

—by moonlight—amidst the ruins of the Colosseum. We all know what became of the Armada, and no one, I imagine, will ever propose beneath the arclights of Earl's Court—or will they?

MR. PICK'S NEW TRAIN

Waiting for my train at Piccadilly Circus last week, what should arrive but the new mildly-streamlined experimental train. Looking quite a lot smoother than usual and very much lighter inside—the upholstery doesn't really rise up and hit you in real life as it does in the photograph.

The streamlining? Not very important, I suspect, for the trains still travel fairly slowly, though it's possible that the fact of their running in a tube may make streamlining more worth while than in the open air. Perhaps an L.P.T.B. engineer would enlighten me?

But the most amusing variation was the new type strap—just a hard rubber stalk with a rubber blob on the end—much easier to grab hold of than the usual wildly swaying loop.

TRAMS

The first English tram was put on the streets by Mr. Train. This was a horse tram at Birkenhead; but even the electric tram, it seems, will have had a life of barely

forty years. London, a little behind the provincial cities as usual, is abolishing five more tram routes and in five years they will all have gone. The only fly in this overdue ointment is the possibility that the tram cars themselves will crop up again as units in the shabbier sort of ribbon development.

Such houses have their points, for you have but to revolve the wheels once each year—that is move your tram the diameter of its wheels times ρ^1 and you are independent of the sanitary inspector and his drains.

This seems very peculiar but it is, I believe, quite true, for it was Professor Thornton White who told me the same story in connection with a stationary caravan he kept down in Sussex. Being generous by nature the Professor gave the local authority more than its due and annually drove his home round the circuit of the field.

JOHN RUSSELL POPE

John Russell Pope died at his home in New York City on Saturday at the age of sixty-three. He belonged essentially to the academic America of pre-war days, to the sound and occasionally brilliant tradition of McKim, Mead and White. His training was typical of his time, for he attended, first the American Academy in Rome and then the Ecole des Beaux Arts. He started practice in 1900 and his works are legion, most of them too well known to need mention here. At his death he was still engaged on plans for the additions to the British Museum and for the National Art Gallery at Washington. The latter was the gift of Mr. Andrew Mellon, who died the day before Mr. Pope.

HAIG STATUE

That England, if you are really honest with yourself, has never produced a really great English sculptor may account for the fact that sculpture and rather bitter controversy invariably go hand in hand. Rima, Night and Day, the Guards' Memorial, Washington, Landseer's Lions—and now Earl Haig.

Eight years of quite irrelevant argument about the good and bad points of an army mount—heavens! can't they see that that lovely little horse on which Charles the First is always just going to prance down Whitehall isn't a bit like a horse either. By emphasis here and simplification there it is everything that is meant by the word "horse," but actually like one—no. If Mr. Hardiman's horse is as good as his lion for the new town hall at Norwich it is very good indeed. Being his third shot, however, it probably lacks spontaneity.

Eight years of bickering and £9,000—whatever the rights and wrongs one can hardly blame Lady Haig for her decision to stop quietly at home when the unveiling takes place. The Office of Works has not even made a "definite decision" about the date for this event.

On the whole it seems to be a blessing that the Cenotaph was purely abstract.

ASTRAGAL

NEWS

POINTS FROM
THIS ISSUE

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MUSEUM OF NATIONALITIES OF
THE U.S.S.R.

The plans have been completed for the new building of the Museum of Nationalities of the U.S.S.R. to be erected on the Lenin Hills, on the outskirts of Moscow. The building has been designed by the Fifth Architectural Studio of the Moscow Soviet, under the direction of Professor Friedman. One side of the new Museum will face the Vorobyevskoye Chaussee, the other will look on to the picturesque embankment of the Moscow River. The Museum will consist of 13 pavilions, interconnected by wide passages. The three-storey central block will have a tower of about 230 ft. high, surmounted by a spire, on top of which will be a five-pointed star.

PROFESSIONAL AMALGAMATIONS IN
SCOTLAND

H.M. Privy Council has, as from July 29, 1937, ratified the amalgamation of the Scottish Estate Factors' Society and the Faculty of Surveyors of Scotland with the Chartered Surveyors' Institution.

The Institution, founded in 1868 and incorporated by Royal Charter in 1881, is composed of 8,600 members organized in 30 branches and practising in Great Britain and overseas as land agents, valuers, building surveyors, quantity surveyors and mining surveyors.

The Scottish Estate Factors' Society was founded in 1898 as a professional association of agents practising in Scotland.

The Faculty of Surveyors of Scotland was incorporated by Royal Charter in 1913, and is the foremost independent society of quantity surveyors in Scotland.

NEW ST. DUNSTAN'S HOME

The foundation stone of the new St. Dunstan's Home at Ovingdean, near Brighton, will be laid on Monday,

THE
ARCHITECTS'
DIARY

Thursday, September 2

SANITARY INSPECTORS' ASSOCIATION. *Jubilee Conference. At the Dome, Brighton. Until September 4.*
BUILDING CENTRE, NEW BOND STREET, W.1. *Exhibition of enlarged photographs of S.S. "Orcades." Until September 25. 10 a.m. to 6 p.m. (Saturdays, 1 p.m.)*

Friday, September 3

TOWN AND COUNTRY PLANNING SUMMER SCHOOL. *At Manchester. Until September 10. For details of the lectures, etc., see page 370.*

Saturday, September 4

PUBLIC SCHOOLS ART EXHIBITION. *At the Imperial Institute, South Kensington, S.W.7. Until September 30.*

Monday, September 6

LIGHTING SERVICE BUREAU, Savoy Hill, W.C.2. *Exhibition of modern lighting methods. Until September 10. 10 a.m. to 5.30 p.m.*

Wednesday, September 8

R.I.B.A., 66 Portland Place, W.1. *Exhibition of the works submitted by candidates for the R.I.B.A. Archibald Dawson Scholarship. Until September 17. 10 a.m. to 8 p.m. (Saturday, 10 a.m. to 2 p.m.)*

Saturday, September 11

ARCHITECTURAL ASSOCIATION. *Annual Excursion to Paris. The party will return to London on September 18.*
BUILDING SURVEYORS' ASSOCIATION. *At 66, Portland Place, W.1. Quarterly General Meeting. "The Duties of the Building Surveyor in Connection with the Public Health Act, 1936." By A. Pierce Clingan. 2.15 p.m.*

September 6, by Lady (Arthur) Pearson, President of the organization. The architect of the scheme is Mr. Francis Lorne.

EXHIBITION AT THE BUILDING
CENTRE

An exhibition of enlarged photographs of the new Orient Liner S.S. "Orcades" is now being held at the Building Centre. The exhibition will remain open until September 25, between the hours of 10 a.m. and 6 p.m. (Saturdays, 1 p.m.).

SLUM CLEARANCE AND REHOUSING

The most recent figures showing the position of slum clearance and rehousing in England and Wales are summarized below:—

Clearance Areas and Orders.—During July local authorities declared areas comprising 4,760 houses, representing the displacement of 19,446 persons, as compared with 4,747 houses and a displacement of 16,173 persons in June. The Orders submitted

during July covered 4,998 houses and the displacement of 16,979 persons, as compared with 5,209 houses and the displacement of 19,270 persons in June. The Orders confirmed during July covered 4,792 houses and 20,555 persons as compared with 5,067 houses and 21,932 persons in June. The total number of houses in confirmed Orders is now 151,597, involving the displacement of 649,611 persons.

Rehousing Progress.—The latest available figures are those for June. At the end of that month there were 64,108 houses under construction as compared with 61,954 at the end of May and 60,326 at the end of April. 5,857 houses were completed during June as compared with 5,904 during May and 6,269 during April.

The great majority of these houses are being provided for rehousing persons displaced in connection with slum clearance schemes. New houses approved during July numbered 7,379 as compared with 8,135 in June and 6,361 in May.

HOUSING PROGRESS IN SCOTLAND

The Department of Health for Scotland announces that during July local authorities completed 1,017 houses, making a total of 6,990 houses for the first seven months of the year. The total for the same seven months of last year was 8,814. The number of houses under construction by local authorities at July 31 stood at 26,028—the highest figure yet recorded—but the number contracted for but not commenced is down to 11,596. The latter figure compares with 13,033 at June 30. The decrease may be ascribed primarily to the fact that during July only 600 houses were contracted for, which suggests that local authorities are more concerned with securing the completion of their houses already contracted for than with entering into fresh commitments. The total number of working class houses completed by local authorities in Scotland since the Armistice is 182,826.

ANNOUNCEMENTS

Mr. Samuel Martin, F.S.I., and Mr. Charles Bowyer, F.S.I., have entered into partnership as chartered surveyors under the name of Samuel Martin and Bowyer, at 5-6 Clement's Inn, Strand.

Mr. Samuel Martin was formerly in partnership with the firm of Thurgood and Martin, and for many years has been the superintending valuer of the South London and Home Counties North Divisions of the Valuation Office, Inland Revenue.

Mr. Charles Bowyer will continue his present general practice as Edward and

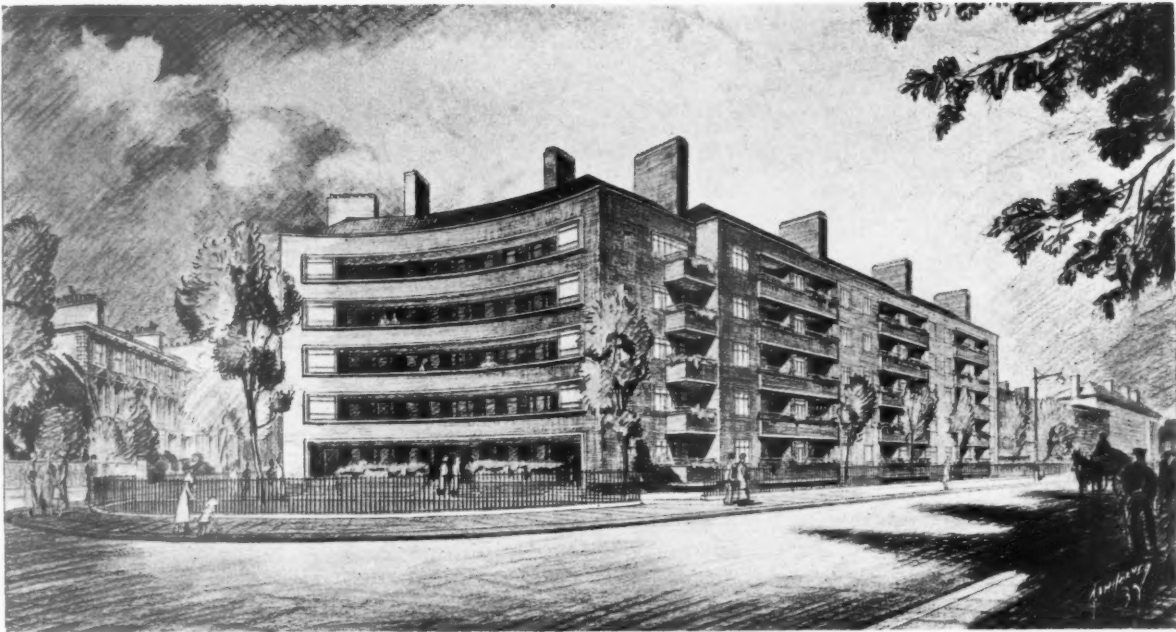
THE KINCORTH ESTATE COMPETITION

As we go to press we learn that Dr. Thomas Adams, F.R.I.B.A., the assessor of the competition for the layout of a part of the Kincorth Estate, Aberdeen, has made his award as follows:

Design placed first (£500): Messrs. Clifford Hollis, Dennis Winston and R. Gardner-Medwin, of London.

Design placed second (£200): Miss R. Ellis and Mr. L. H. Bucknell, of London.

Designs placed third and fourth (£75 each): Messrs. Dricorti M. Hirsch and M. Pinches, of Bucharest; and Wesley Dougill and E. A. Feribby, of Liverpool.



This scheme at Stoke Newington, which is being carried out for the L.C.C., comprises 74 flats, some of which overlook Clissold Park and is now nearing completion. All except the smaller flats, which are in the curved front block, are approached by internal access stairs. All flats have large private balconies, separate bathrooms with built-in baths and lavatory basins, and separate W.C.s. The architect is Mr. Edward Armstrong. The drawing is reproduced by permission of the L.C.C.

Charles Bowyer at Slough and Bracknell, and Egginton and Son, at Reading.

CHANGES OF ADDRESS

Mr. David Stokes, late of 3A Mulberry Walk, S.W.3, has moved to 5 Cochrane Street, N.W.8.

Mr. H. Myles Wright, M.A., A.R.I.B.A., has moved to 5 Great James Street, W.C.1. Telephone No. : Holborn 6678

OBITUARY

Leonard Maggs

Mr. Leonard Maggs, F.R.I.B.A., F.S.I., County Architect of Nottingham, whose death, at the age of 62, we announced last week, held the office for 30 years, and was responsible for the design and erection of many schools and public buildings in Nottinghamshire, including technical colleges, police stations, and the Ransom Sanatorium extension. Mr. Maggs designed the Worksop Technical College, and was also architect for the Central School, Worksop, the group of schools at Bircotes, and, in fact, for all the schools erected in the new colliery villages.

W. S. Skinner

We regret to record the death of Mr. William Swinton Skinner, F.R.I.B.A., senior member of the firm of Messrs. W. S. Skinner and Sons, of Bristol. He was 84 years of age.

Born in 1853 in Ohio, U.S.A., Mr. Skinner was articled to Messrs. Drury and Mortimer, of Lincoln, and subsequently became architectural assistant to the Corporation of Bristol, a position he held for 20 years. He left the Corporation's service in 1898.

With Sir George Oatley, then Mr. Oatley, he went in for numerous competitions for the design of asylums, and their joint efforts were successful in securing several

first prizes, including the competitions for the Winwick, Croydon and Cardiff asylums.

Mr. Skinner was in practice on his own in Bristol until 1918, and in 1919 his sons, Mr. T. A. Skinner and Mr. C. G. Skinner, joined him to form the present firm. He retired from active work in 1931.

R. I. B. A.



"MODERN SCHOOLS" EXHIBITION

Professor John Hilton, M.A., is to open an exhibition entitled "Modern Schools" on Tuesday, October 12, 1937, at the R.I.B.A.

The exhibition, which has been arranged by a special committee of architects, will show education authorities, educationalists and the general public the newest ideas in the planning, equipment and design of school buildings. It will supply information of use in the Government's new drive to bring the State school establishments of this country up to date. The exhibition has received the approval and assistance of the Board of Education and its principal basis as regards elementary schools is the Board's recent pamphlet No. 107, in which the new outlook on school design is laid down. The pamphlet urges that "schools should be attractive features in the architectural layout of a neighbourhood," that

their planning should aim at "compactness for convenience, and ample light and air for health," and that they should "become social and cultural centres." The exhibition has been created in the spirit of these suggestions.

The exhibition will consist of more than 250 photographic enlargements, diagrams and models. With very few exceptions only buildings that have been erected will be illustrated so as to keep the exhibition strictly within the realm of practical possibilities. Examples are not limited to Great Britain; foreign schools that show ideas applicable to this country, and the general trend of design abroad, are included. Since also the exhibition is concerned with childhood under State educational systems, the few illustrations drawn from English public schools have been included for the same reason. The diagrams will illustrate matters not easily shown by photographs, such as classroom planning, circulation, special equipment, etc.

The Council for the Ten-Year Plan is contributing a special section aimed at showing the need for modernization of school buildings. Examples of out-of-date buildings will be shown in contrast with new ones of similar sizes and types.

The exhibition will be open to the public, admission free, at the R.I.B.A., 66 Portland Place, W.1, from Wednesday, October 13, to Tuesday, October 19, after which it will tour the provinces. There has already been a heavy demand for it from education authorities and the tour is provisionally booked until the end of 1938. It will return to London for inclusion in a School Exhibition to be held at Dorland Hall from December 20, 1937, to January 12, 1938.

Provincial bookings are as follows: Hull, November 1937; Rugby, November-

December 1937; Reading, January-February 1938; Newport, February-March 1938; Hereford, March-April 1938; Carlisle, August-September 1938; Darlington, November-December 1938. Other centres for which provisional bookings have been made but dates not yet finally decided are: Birmingham, Birkenhead, Blackburn and Sunderland. Further applications are being continually received.

R.I.B.A. (ARCHIBALD DAWNAY)
SCHOLARSHIPS

The works submitted by candidates for the R.I.B.A. (Archibald Dawnay) Scholarships will be on exhibition at the R.I.B.A. from Wednesday, September 8, to Friday, September 17, 1937, inclusive. The exhibition will be open between the hours of 10 a.m. and 7 p.m. (Saturday, 10 a.m. and 2 p.m.).

The scholarships are intended to foster the advanced study of all forms of construction, and are tenable at the schools of architecture recognized for exemption from the examinations of the Royal Institute.

FINAL AND SPECIAL FINAL
EXAMINATIONS—INDIA

The R.I.B.A. Examination Board in India has arranged to hold the R.I.B.A. Final and Special Final Examinations in Bombay from November 12 to 20, 1937. The last day for receiving applications, which should be sent to the Hon. Secretary of the R.I.B.A. Examination Board in India, "Gustad Chambers," Sir Pheroze Shaw Mehta Road, Bombay, is October 12.

Limited Competition

The Manchester Society of Architects has just issued conditions of a competition for the design of a cinema in an industrial town. The competition is open to senior student members of the Manchester Society of Architects, Burnley Society of Architects, Oldham Society of Architects, Blackpool and Fylde Architectural Society, and Preston, Blackburn and District Society of Architects. The closing date is October 27, and two premiums are offered: ten guineas and three guineas.

Competition News

SEPTEMBER 13—Sending-in Day. The City of Coventry Local Education Authority invites registered architects who on May 1, 1937, were ordinarily resident or practising in the City of Coventry to submit in two competitions designs for two new schools as follows: (a) For a new Public Elementary School for Juniors and Infants on the "Hill Farm" Estate, Coventry. Assessor: Mr. W. T. Benslyn, F.R.I.B.A. Premiums: £100, £50 and £30. Last day for submission of designs: September 13. Last day for questions was July 5. (b) For new Public Elementary Schools for Senior Boys and Senior Girls on the "Oakhurst" site between Brownhill Green Road and Keresley Road. Assessor: Mr. W. T. Benslyn, F.R.I.B.A. Premiums: £100, £75 and £50. Last day for submission of designs: September 13. Last day for questions was July 5. Conditions of each competition may be obtained on application to the Director of Education, Council House, Coventry.

SEPTEMBER 20—Sending-in Day. The promoters of the Building Trades Exhibition invite architects to submit designs for bachelor flats combined with a recreation and social club. Assessors: Mr. B. M. Ward, F.R.I.B.A., President of the Liverpool Architectural Society; Mr. Leonard Barnish, F.R.I.B.A.; Lt.-Col. Ernest Gee, F.R.I.B.A. Premiums: £70, £30, and £20. The last day for submission of designs is September 20. Conditions of the competition may be obtained on application to Provincial Exhibitions, Ltd., Renshaw Hall, Liverpool, 1.

SEPTEMBER 29—Sending-in Day. The Royal Burgh of Kirkcaldy invites architects practising in Scotland to submit designs for new Municipal Buildings. Assessor: Mr. T. S. Tait, F.R.I.B.A. Premiums: £200, £150 and £100. The last day for submission of designs has been extended to September 29, 1937. The last day for questions was June 21. Conditions of the competition may be obtained on application to the Town Clerk, Kirkcaldy. Deposit £1.

OCTOBER 15—Sending-in Day. Designs are invited for the decoration of one of the entrance halls of the new buildings of the Glass Department of the University of Sheffield, now in course of erection. Designs should provide for as full a use as possible of glass as the decorative medium. Premiums: 25 guineas and 10 guineas. The sum allocated to carrying out the work is approximately £800. The Adjudicating Committee reserves the right to make no

prize award if, in its opinion, the designs submitted fall below a satisfactory standard. Designs must be submitted not later than Friday, October 15, to Mr. W. M. Gibbons, Registrar, University of Sheffield, from whom further particulars may be obtained.

NOVEMBER 19—Sending-in Day. 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. Assessor: Mr. T. Cecil Howitt, F.R.I.B.A. Premiums: £500, £250, and £150. The last day for questions is September 10; 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.

DECEMBER 22—Sending-in Day. The Keighley Education Authority invites architects to submit designs for a New Senior Mixed School, proposed to be erected on the Guard House Site, Keighley, Yorkshire. Assessor: Mr. Harold A. Dod, M.A., F.R.I.B.A. Premiums: 150 guineas, 100 guineas, 50 guineas. Last day for submission of designs: December 22. Last day for questions: September 4. Conditions of the competition may be obtained on application to Mr. E. Ratcliffe, Director of Education, Education Office, Keighley, Yorks. Deposit £2 2s.

LETTERS FROM READERS

Salaried Architects

SIR,—“Chartered Architect and Surveyor,” in his letter appearing in your issue for August 26, makes several points in contradiction of my previous letter, to which I should like your permission to reply.

1: He asks: Are the conditions of Fellowship deliberately drawn up to oppose the interests of Associates and Licentiatees? Stripped of verbal camouflage (having been in private practice or a position of responsibility for a stated period) a Fellow must be a boss. The question becomes: Are the interests of bosses the interests of non-bosses? Of course they are not.

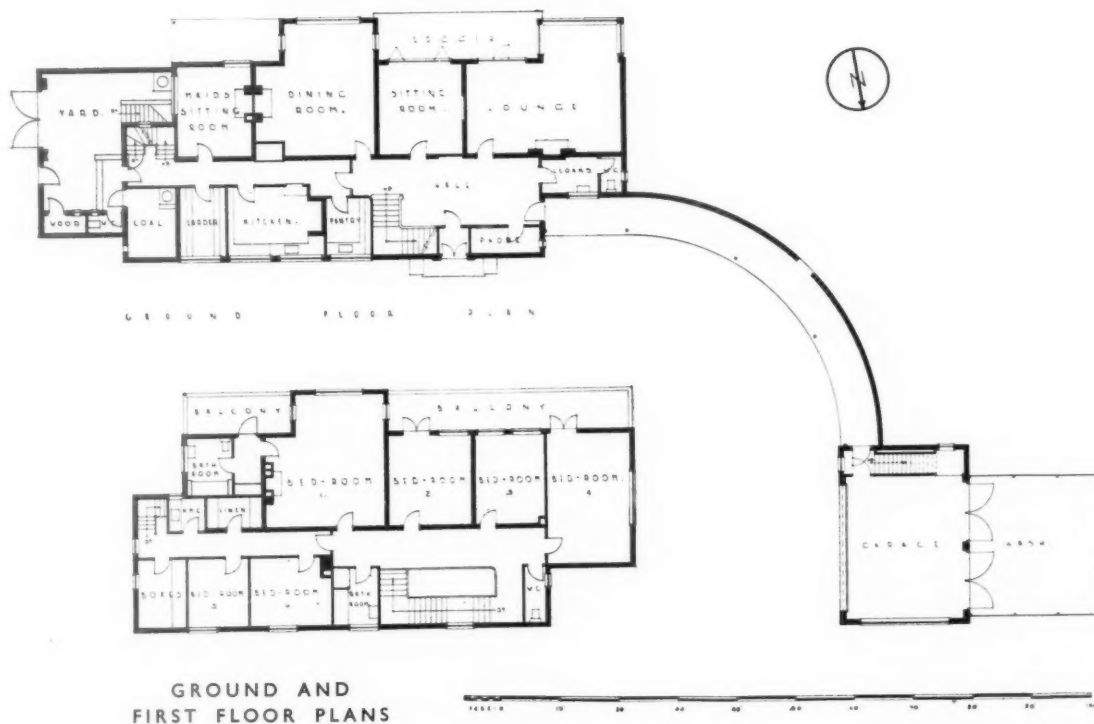
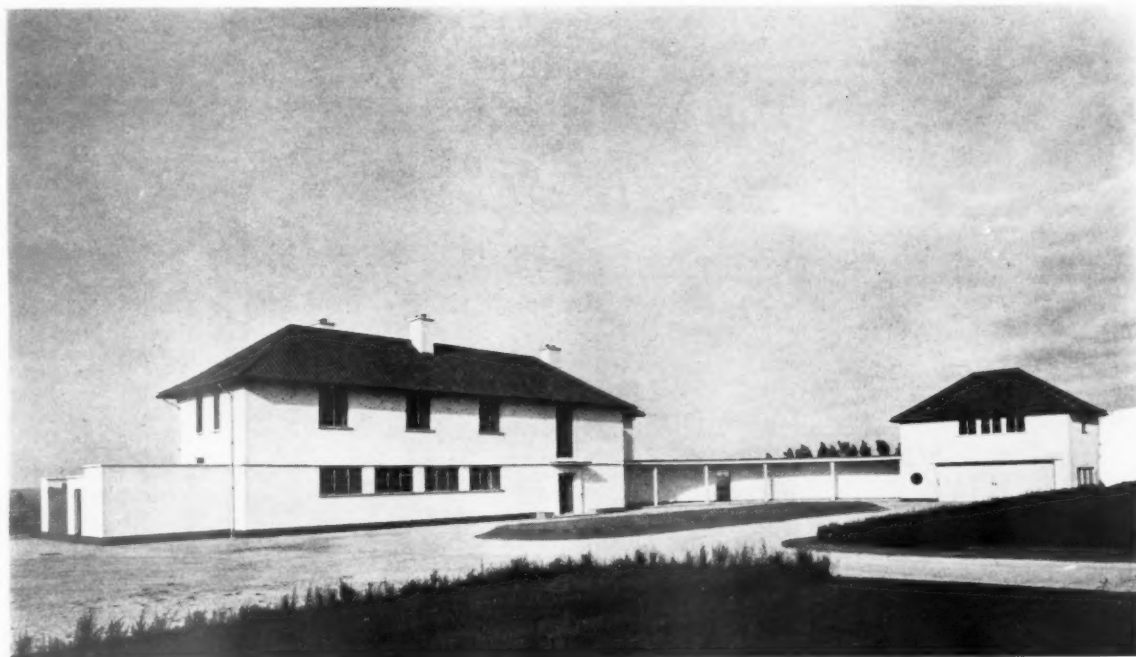
2: He tells me that the democratic method of settling an issue is by voting for the right men. The right men (*vide* the constitution of the R.I.B.A. Council) must be bosses. To my mind, the point smacks of the policy of Henry Ford, who let the public choose any colour of car, provided they chose black. Very democratic!

3: He asks me whether, in the event of his having more work to do than he can manage without assistance, and paying men (why not architects?) to

help him, I would say that he was not giving them jobs? Yes, I would. Commercially, what is implied is a sale of services for money. Nothing is necessarily *given* by either party. “Chartered Architect and Surveyor” here puts himself on to the retail, and his “men” on to the wholesale side of the architectural business. If he were to meet with a lorry or a tram, what would happen to the “more than he can do without assistance”? It would still be there to be done. Someone else would do it. The admission of the justice of my contention, however, that no one architect can claim to be *giving* another a job, comes from Cæsar himself. On page 940 of the current issue of the *R.I.B.A. Journal*, we are informed that the scale of salaries recommended for salaried members has reference to *normal* times. If architects can create demand, why need there ever be other than normal times? Let “Chartered Architect and Surveyor” imagine himself in the centre of a depression, and then see how much “job giving” his personal advertisement enables him to do.

DEMOCRAT

HOUSE AT PERTON, STAFFORDSHIRE



GROUND AND
FIRST FLOOR PLANS

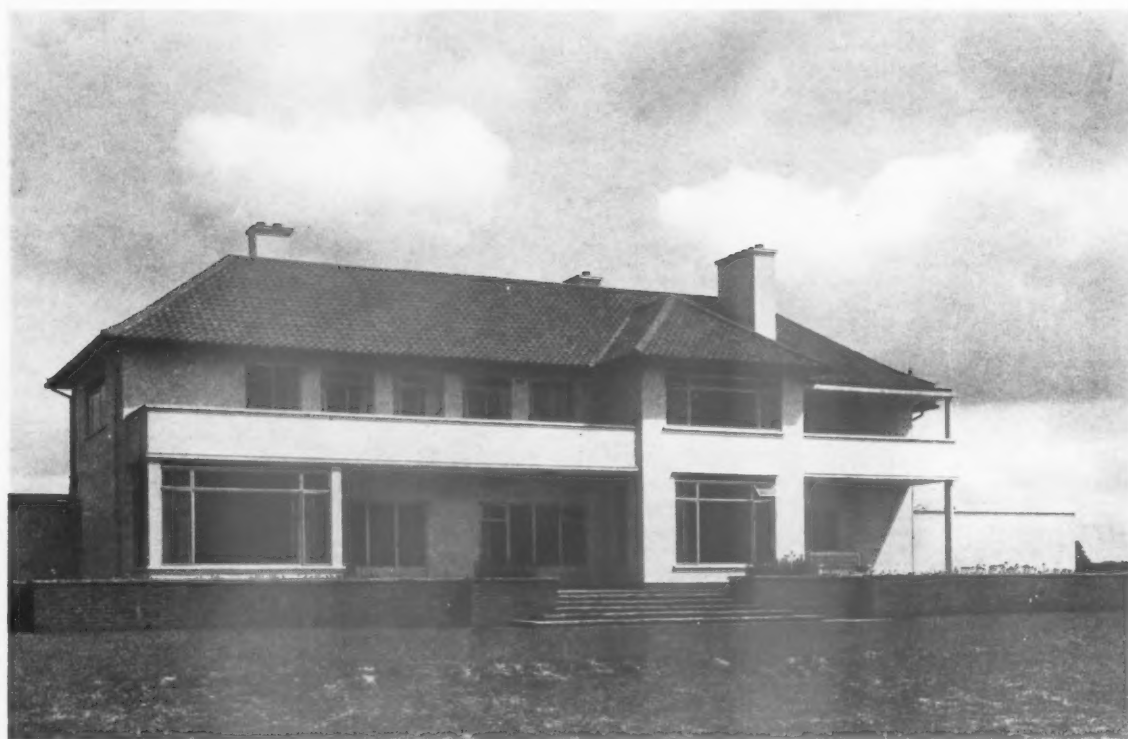
SITE—On the south side of the road on a ridge, with the view to the south and houses on either side. The block plan is arranged so that the garage adjoins the stables of the neighbouring house on the west side. This, together with the colonnade, prevents the house from being overlooked from the west.

The photograph is taken looking south-west.

DESIGNED BY

LAVENDER AND TWENTYMAN

HOUSE AT PERTON, STAFFORDSHIRE:



PLAN—Aspect and view made it desirable to plan as many rooms as possible to face south. The client's special requirements were: a spacious hall and staircase; bay window in lounge; recessed fireplace in dining room; sleeping balcony to own bedroom, not overlooked; and a playroom and workshop, with covered access from house.

CONSTRUCTION—9-in. brick walls, cemented and colour washed; roof, pantiles on boarding and felting; balconies, reinforced concrete; colonnade, wood; and floors, boarding and joists.

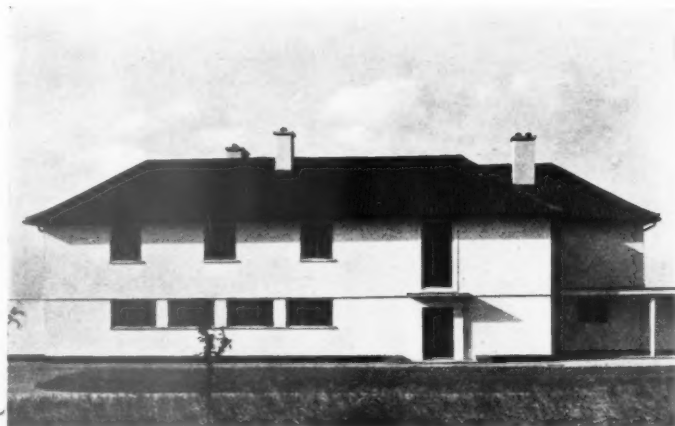
ELEVATIONAL TREATMENT—The client stipulated that the house should have a pitched roof. Colours are: walls and windows, ivory; pantiles, dark red; soffite of eaves, pale green; wrought-iron door in colonnade, black picked out in green and gilt.

INTERNAL FINISHES—The floors and joinery of the main ground floor rooms are oak; the floors of the hall and landing are Australian walnut boards; and other floors are deal boards. Doors are flush, veneered oak, walnut or alder. The staircase has Australian walnut treads and risers; a solid balustrade on studding, plastered on the outside, and finished inside with walnut-faced plywood; a walnut capping and a black bronze handrail. Fireplace surrounds generally are veneered laminated board. Built-in cupboards in the bedrooms were not required. Bathroom walls are tiled, and the floors are in cork squares. The kitchen and pantry have tiled walls, quarry floors and built-in fitments.

The photographs show: above, the south front; left, the entrance hall and staircase.



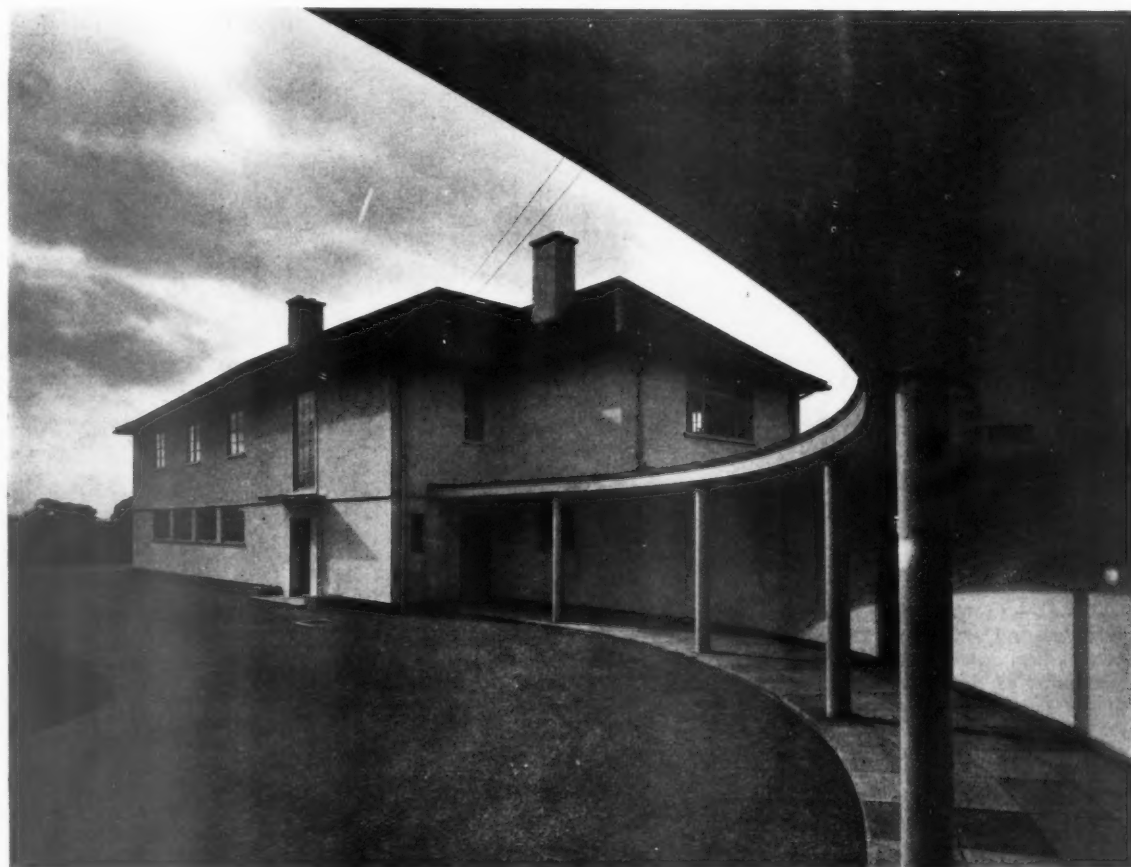
DESIGNED BY LAVENDER AND TWENTYMAN



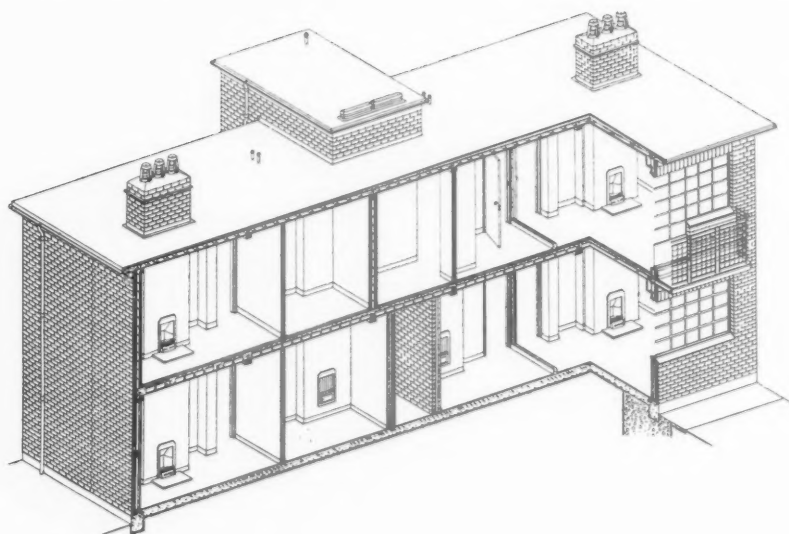
SERVICES — Heating is by hot water, by radiators concealed under the windows in the main rooms, and by ceiling radiators in the hall. The domestic hot water is from an independent boiler. There are coal fires in the lounge, dining-room and own bedroom, and electric fires in the hall, sitting-room and three bedrooms.

The photographs show : above, the north front ; right, the bathroom adjoining own bedroom ; below, looking from the colonnade towards the north front.

For list of general and sub-contractors see page 385.



DEMONSTRATION FLATS AT KING'S



GENERAL—The British Steelwork Association has always been strong supporters of the Council for Research on Housing Construction, and now the Sheet Steel Market Development Committee, an offshoot of the parent body, has carried the process a step further and has built a block of experimental flats on a site in Battlebridge Road, King's Cross. In this it has been helped by the Gas Light and Coke Company, who have given the site. This firm are to take over the building after the demonstration period and use it for housing their own employees.

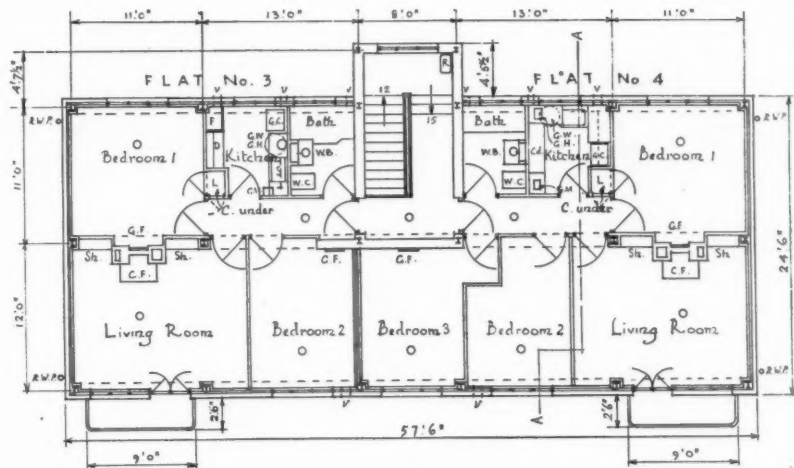
It should be clearly understood that the building is intended to be an experiment, and is not put forward as the

last word in housing construction. The Building Research Station and the National Physical Laboratory have both been doing a great deal of research on housing construction during the last few years, and their experimental findings are now receiving a full-scale test. Bearing in mind the commercial interests of the sponsors, it is only natural to find that sheet steel has been freely used wherever possible, but it has been used in a logical and reasonable way and, as part of a long-term programme of research, a full-scale test is the only really reliable way of finding out whether laboratory suggestions can stand up to the wear and tear of everyday use.

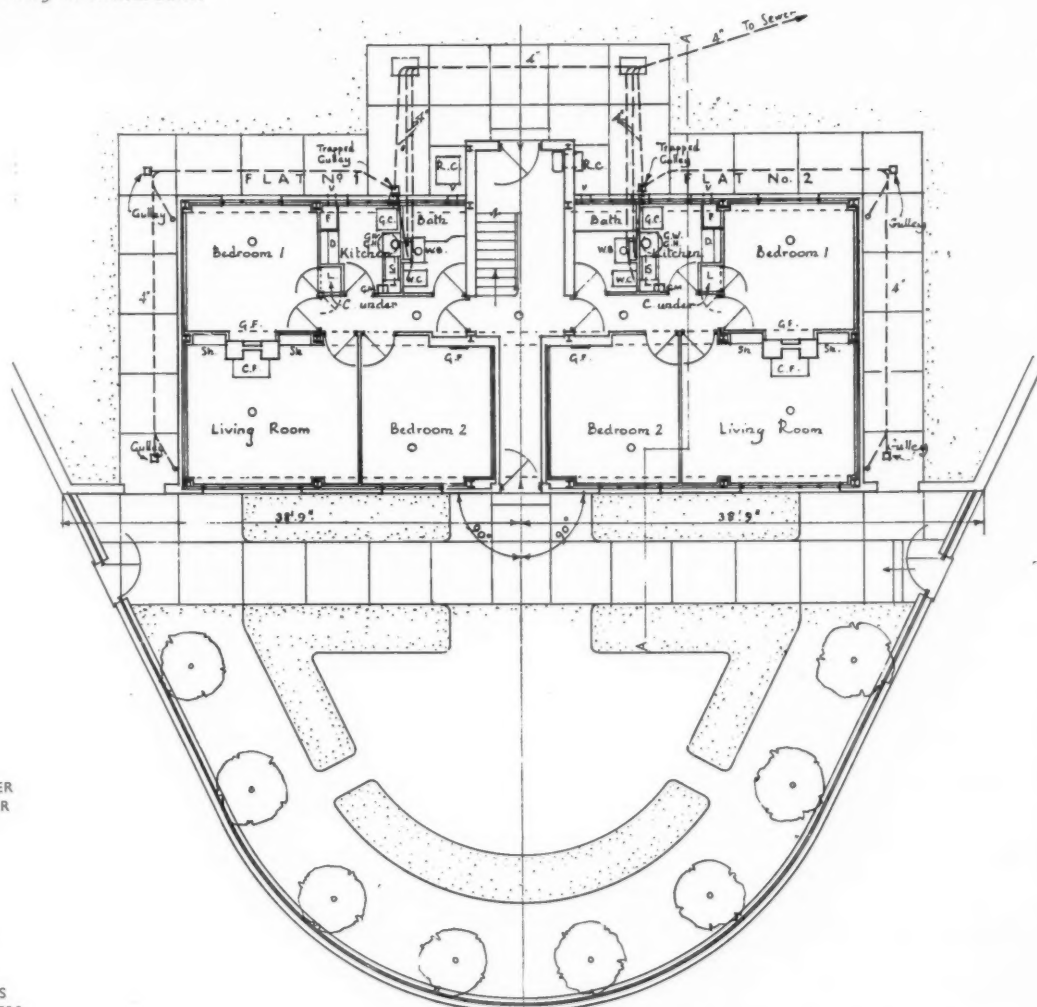
CROSS: DESIGNED BY JOHN DOWER

SITE AND PLANNING—Since the site was limited in size the building has been kept down to two storeys, containing four flats, three two-bedroom and one three-bedroom, but the design adopted for the unit flat would apply equally well to blocks of four or five storeys, containing in each block from 20 to 100 flats of varying sizes (one, two, three and four bedrooms). With the addition of lifts and minor adaptation, the same design would apply to higher buildings of eight, ten or more storeys. The planning of the flats follows, in the sizes and general disposition of rooms, the standard provisions recommended by the Council for Research on Housing Construction and other authorities, with access by internal staircases, each serving two flats only per floor.

The kitchen and bathroom-w.c. of each flat form a standard unit arranged at uniform vertical and horizontal intervals throughout the block to give maximum convenience and economy in plumbing, which is designed on either the "one-pipe" or the "one-stack" system and housed internally in vertical ducts.



FIRST FLOOR PLAN



GROUND FLOOR PLAN

REFERENCES

- GC.—GAS COOKER
- GH.—GAS WATER HEATER
- GW.—GAS WASH COPPER
- GF.—GAS FIRE
- CF.—COKE-GAS FIRE
- GM.—GAS METER
- Sh.—SHELVES
- V.—VENTILATOR
- C.—COKE STORE
- L.—LINEN CUPBOARD
- F.—FOOD CUPBOARD
- D.—DRESSER
- S.—SINK WITH DRAINERS
- RC.—RUBBISH CONTAINERS
- R.—RUBBISH SHOOT

DEMONSTRATION FLATS AT KING'S

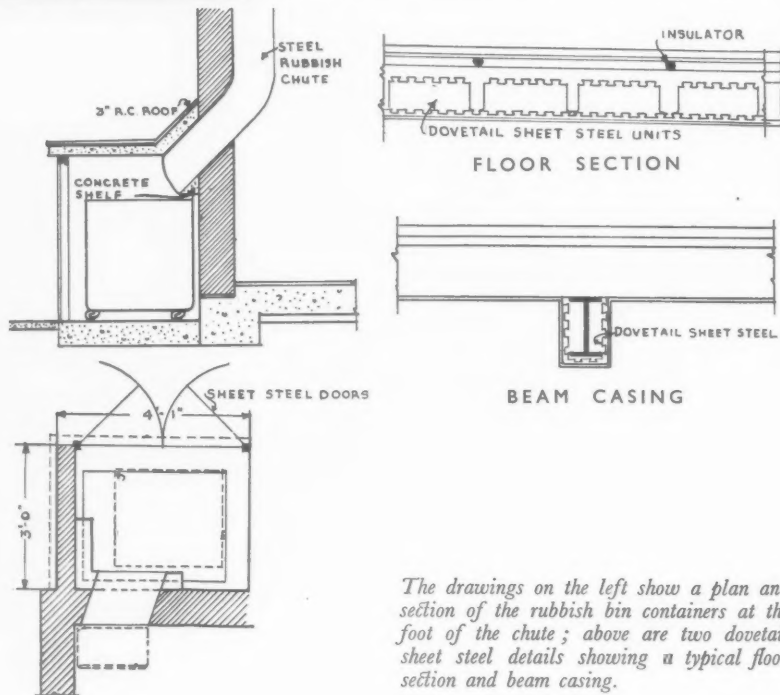


FRAME—A normal steel frame is used in conjunction with a pressed steel staircase of the type now common on many large jobs.

WALLS AND PARTITIONS—The outside leaf of the cavity wall consists of rustic Flettons, and for the inner leaf and the partitions three alternative materials have been used. In flat one the partitions are formed of hollow panels of dovetail steel sheeting similar to those used for the floor and roof, and insulated with slag wool. This steel wall, which can be very rapidly erected in pre-fabricated units, is exceedingly strong, and provides, in its dovetail surface, an admirable key for the two-coat plaster finish. Flat two is partitioned with anhydrite blocks; and flats three and four use hollow tile blocks—similar units made of brick earth and grooved to provide a plaster key.

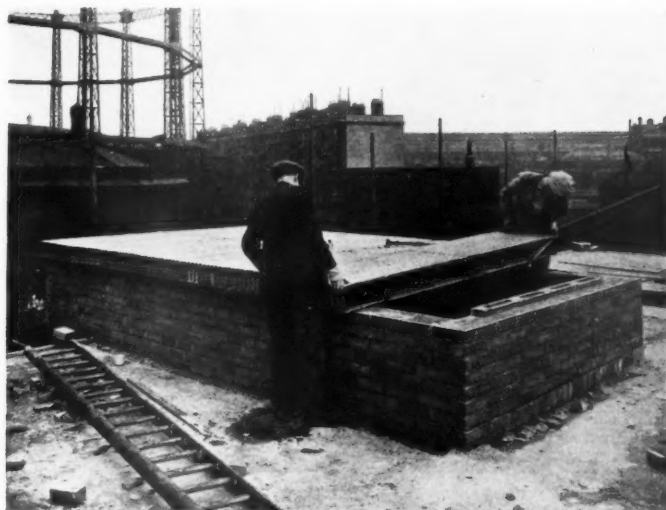
DOORS AND WINDOWS—Door and window frames are in pressed steel throughout, the window frames showing a new development of steel cavity sub-frames in that the same pressing which forms the actual window-frame also forms the internal cill, jambs and soffit of the window opening—thus replacing plaster and wood at points where they are most liable to damage from damp and from sun heat.

The photographs on this page show two views of the pressed steel staircase, below, during erection and left, finished.



The drawings on the left show a plan and section of the rubbish bin containers at the foot of the chute; above are two dovetail sheet steel details showing a typical floor section and beam casing.

CROSS: DESIGNED BY JOHN DOWER



FLOOR—The whole of the intermediate floor and of the roof, including all beam casings, is constructed in dovetail-corrugated steel sheeting. The floor is made up of spot-welded cellular units each 2 ft. wide and 12 ft. (room span) long. The units, which can be used as a working floor as soon as they are laid, rest at their ends on the beams of the steel frame; no fixing connections are required and sound-deadening asbestos strips can therefore be interposed. Each unit weighs only 96 lb. and is easily handled into position by two men in a few minutes without any centring or special equipment. The floor is completed at a later stage by running in narrow stiffening ribs of concrete between the units and floating on a top surface of cement screed: the whole when finished weighs only 21 lb. per square foot.

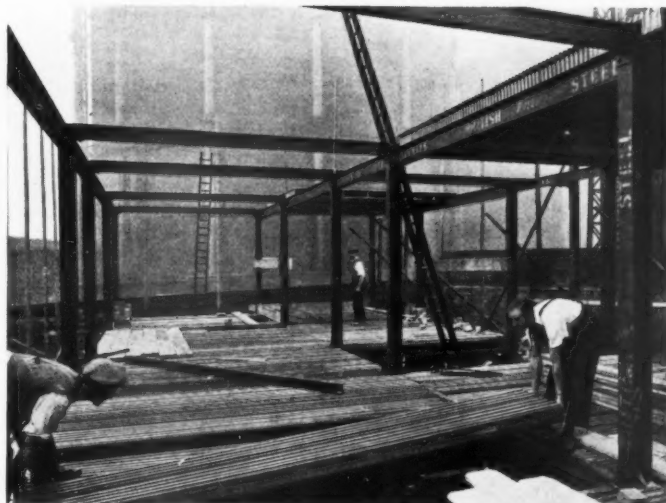
Such a floor, approximately 6 inches thick overall (including plaster ceiling finish) would be adequate for many purposes without further addition; but in this building a floating over-floor has been added in order to reduce to a minimum the transmission of sound from floor to floor. The floating floor consists of a further single layer of screed-covered dovetail steel sheeting resting on timber battens laid, on asbestos strips, on the screed surface of the structural floor. Each room has its own separate floating floor isolated all round against the partitions by further asbestos strips.

ROOF—The alternative type of hollow sheet steel unit used for the roof is stiffened internally by vertical and diagonal members and requires no concrete ribs, the units being jointed into each other at the sides. The continuous $\frac{1}{2}$ -inch air-space has been provided to insulate the top floor rooms from excessive heat or cold, and the steel structure lends itself conveniently to any desired type of flat roof finish. The steel units have been cantilevered over the walls to form ample eaves, cement rendered and painted, and have been covered with screeding to slight falls, and with two alternative forms of bituminous roofing as final water-proof skin. The balconies are cantilevered out in the sheet steel structure of the intermediate floor.

EQUIPMENT—Arranged for heating, cooking and lighting by gas, there is also a large amount of pressed steel used in the bathrooms and kitchens, two typical views being shown on page 384 of this issue.

The photographs on this page show: top, the roof units being placed in position; centre, the ease with which the 12-ft. floor units can be handled; bottom, the dovetail sheeting as ceiling and beam casing ready to receive the plaster finish.

For list of sub-contractors and suppliers see page 385.



SCHOOLS

TOWN AND COUNTRY PLANNING SUMMER SCHOOL

Following is the programme of the Town and Country Planning Summer School (under the auspices of the Town Planning Institute), to be held at Ashburne Hall, Fallowfield, Manchester, from September 3 to 10. All meetings, except those on Friday at 8 p.m. and on Saturday morning will be held at Ashburne Hall.

Friday, September 3.—6 p.m.: Assembly and registration of members of the School at Ashburne Hall. 8 p.m.: Public meeting in the Town Hall, Manchester. Address by Sir Ernest Simon, M.A., "Planning in Moscow and Manchester Compared."

Saturday, September 4.—10 a.m.: Opening meeting in the Town Hall, Manchester. Address of Welcome to the School by Alderman J. Binns, M.B.E., J.P., on behalf of the Rt. Hon. the Lord Mayor of Manchester. 10.15 a.m.: "Wythenshawe." By Mr. Barry Parker, J.P., F.R.I.B.A., and Alderman W. T. Jackson, J.P. 11 a.m.: "Town Planning in Manchester and District." By Major Walker, F.S.I., A.M.I.N.S.T.C.E. 11.45 a.m.: Discussion to be opened by Mr. F. L. Halliday, A.R.I.B.A., A.M.T.P.I. 2 p.m.: "National Survey." By Professor Patrick Abercrombie, M.A., F.R.I.B.A. 2.45 p.m.: Discussion to be opened by Professor Woodroffe. 4.45 p.m.: "A Practical Policy for National Decentralization." By Mr. F. J. Osborn. 5.45 p.m.: Discussion. 8 p.m.: Film of the 1936 Town and Country Planning Summer School at Salisbury, to be shown by Mr. Francis Bruhl, of Paris, supplemented by a film of the Paris Exhibition in course of construction.

Sunday, September 5.—The morning is free. 2.30 p.m.: "A Policy for National Parks in Great Britain." By Mr. John Dower, M.A., A.R.I.B.A. 3.30 p.m.: Discussion to be opened by Dr. Thomas Adams, F.R.I.B.A., F.S.I. 5 p.m.: Visits to Manchester City and Environs (including re-housing schemes). 8 p.m.: Discussion on "Compensation and Betterment under the Town and Country Planning Act, 1932," to be opened by the Chairman.

Monday, September 6.—10 a.m.: "The Place of Planning in National and Local Administration." By Mr. R. A. Hudson, M.T.P.I. 10.45 a.m.: "The Administration of Town and Country Planning on a County Basis—Its Advantages and Limitations." By Mr. H. W. J. Heck, M.T.P.I., M.I.N.S.T.M. & C.Y.E. 11.30 a.m.: Discussion to be opened by Mr. H. Robinson, M.T.P.I., M.I.N.S.T.M. & C.Y.E. 2 p.m.: Visit to Wythenshawe. 5.15 p.m.: "The Administration of an Operative Town Planning Scheme." By Mr. H. Manzoni, M.I.N.S.T.C.E., M.T.P.I. 8 p.m.: "Regional Planning in Cheshire." By Mr. W. Dobson Chapman, A.M.T.P.I., A.I.L.A. Discussion to be opened by Mr. Geoffrey Scrimgeour.

Tuesday, September 7.—10 a.m.: "The Planning of Agriculture." By Mr. E. A. A. Rowse, A.R.I.B.A. 10.45 a.m.: "Industrial Planning in Relation to Rural Amenities." By Mr. J. H. Forshaw, M.A., F.R.I.B.A., A.M.T.P.I. 11.30 a.m.: Discussion. 2.30 p.m.: "Planology." By Mr. A. M. de Casseres, A.M.T.P.I. 3.15 p.m.: Discussion. 4 p.m.: Conducted Tour of Trafford Park and Docks. 8 p.m.: Discussion Groups on alternative subjects: (1) "Highway Planning as an Integral Part of Town and Country Planning," to be opened by Mr. W. L. Waide, A.M.T.P.I.; (2) "The latest Ministry of Health Model Clauses," to be opened by Mr. J. W. R. Adams, M.T.P.I.

Wednesday, September 8.—10 a.m.: "Modern Trends in English City Planning." By Colonel W. S. Cameron, A.M.I.N.S.T.C.E., M.T.P.I. 10.45 a.m.: "A National Road Scheme incorporating Aesthetic Aspects." By Mr. E. L. Lemming, M.Sc., M.I.N.S.T.C.E. 11.30 a.m.: Discussion to be opened by Mr. G. C. Craven,

M.I.N.S.T.M. & C.Y.E., M.T.P.I. 2.30 p.m.: "Twentieth Century Towns for Twentieth Century People." By Mr. Robert Sinclair. 3.15 p.m.: Discussion to be opened by Mr. T. F. Thomson, A.M.P.T.I., A.I.L.A. 4.45 p.m.: "City Transport Problems." By Mr. R. Stuart Pilcher, F.R.S.E., M.I.N.S.T.T. 6 p.m.: Discussion. 8 p.m.: Business meeting of the School.

Thursday, September 9.—10 a.m.: Conducted Tour to parts of West Derbyshire and East Cheshire. Lunch at Buxton.

Friday, September 10.—10 a.m.: Tour to Liverpool (visiting Mersey Tunnel), Wallasey, etc. (Full details to be announced at the School.)

WELSH SCHOOL OF ARCHITECTURE

The new term of the Welsh School of Architecture begins on Monday, October 4. Intending students are advised to apply at an early date for the particulars of the courses of instruction and of the entrance and scholarship examinations. Candidates for the latter should obtain application forms which must be completed and submitted by September 16.

The School of Architecture, which for the last ten years has been granted the status of Final Recognition by the R.I.B.A., is accommodated in the new wing of the Technical College in Cathays Park, Cardiff.

At this College, ten scholarships covering tuition fees and maintenance grants of £40 per annum for three years are offered for competition annually. Candidates for entry to the Welsh School of Architecture are eligible to compete for these scholarships. The Scholarship Examination is a competitive one, and is of about the same standard as matriculation.

The Welsh School of Architecture has now been at work for rather more than 16 years under the charge of Mr. W. S. Purchon, M.A., F.R.I.B.A., the Lecturer in Architecture being Mr. Lewis John, M.A., B.A.R.C.H., A.R.I.B.A., and the Assistant Lecturers Mr. D. M. Jones, B.A.R.C.H., A.R.I.B.A., and Mr. C. L. Matthew, A.R.I.B.A. The following local architects assist in the work of the advanced courses as Honorary Lecturers: Messrs. Percy Thomas, P.P.R.I.B.A., Ivor Jones, A.R.I.B.A., T. Alwyn Lloyd, F.R.I.B.A., P.P.T.P.I., H. Teather, F.R.I.B.A., J. Williamson, A.R.I.B.A., and A. J. Hayes.

The three years' full-time day course leads to the award of the certificate, to the holders of which the R.I.B.A. grants exemption from its Intermediate Examination, while those students who successfully pass through the diploma course are exempted from the R.I.B.A. Final Examination, a special course of lectures on professional practice and a special examination in this subject being held in the school. Success in the Diploma Examination also forms a complete qualification for registration under the Architects' Registration Act of 1931. This Diploma Course follows the Certificate Course and consists of two sessions, the former of these being normally of six months' duration only, the intervening six months being spent in architects' offices.

The Court of the University of Wales has recently approved a scheme for the award of degrees in architecture. The scheme provides for a preliminary year in any one of the Colleges of the University of Wales, followed by a five years' course in the Welsh School of Architecture.

There is also an Evening Atelier for

architects' assistants who cannot attend the day course.

The Department is in close touch with the South Wales Institute of Architects, representatives of this body being on the Advisory Committee of the School, and students of the School are eligible for the prizes awarded by the Institute. In addition to these awards there are a number of school prizes presented in the main by local architects.

The external examiners are Professor L. B. Budden of the University of Liverpool, and Mr. W. B. Edwards of Armstrong College, Newcastle-upon-Tyne.

Full particulars are obtainable from Mr. W. S. Purchon, The Technical College, Cardiff.

Building Industries' National Council

"Activity in the building industry is at a very high level, the estimated number of insured operatives in employment establishing a new record," states the current issue of *The Building Industries Survey*, published by the Building Industries National Council.

"The contracting sections of the industry are very busy, especially in connection with non-residential buildings. Factory construction is at a high level, and continues to increase under the stimulus of general prosperity, the re-armament programme and its indirect effects, and improving exports of British manufactures. It is noticeable that this activity is becoming more widespread geographically, with considerable advances in the Midlands and the North of England. Every indication points to a continuance of the improvement in this branch.

"Housing activity is also at a high level, and favourable repercussions on the demand for the more expensive houses may be expected from growing and spreading prosperity. The increase in the number and proportion of dwellings built by private enterprise to let is a favourable sign, and reflects the fact that a new market is being developed, especially by the provision of modern flats in the main centres of population.

"The position of public works contracting continues to improve, and a number of large schemes are reaching the stage of maximum demand for labour and materials. At the same time further schemes are being commenced which will enter the most active stage next year, thus ensuring future activity. In some cases local authorities are also preparing plans to meet actual or anticipated needs, ready to be put in hand when the re-armament programme is in a less active stage.

"The materials industries are very active, and are making heavy deliveries. This favourable position seems assured for some time to come by the programme of construction in connection with slum replacement and overcrowding abatement, by plans for factory construction and extension, and by the re-armament programme."

National Coal Convention

The third National Coal Convention is to be held at Harrogate on October 6 and 7. The Convention will be officially opened by H.R.H. the Princess Royal.

WORKING DETAILS : 587

TOY SHOP • WIMPOLE STREET, W. • ERNÖ GOLDFINGER AND G. W. FLOWER



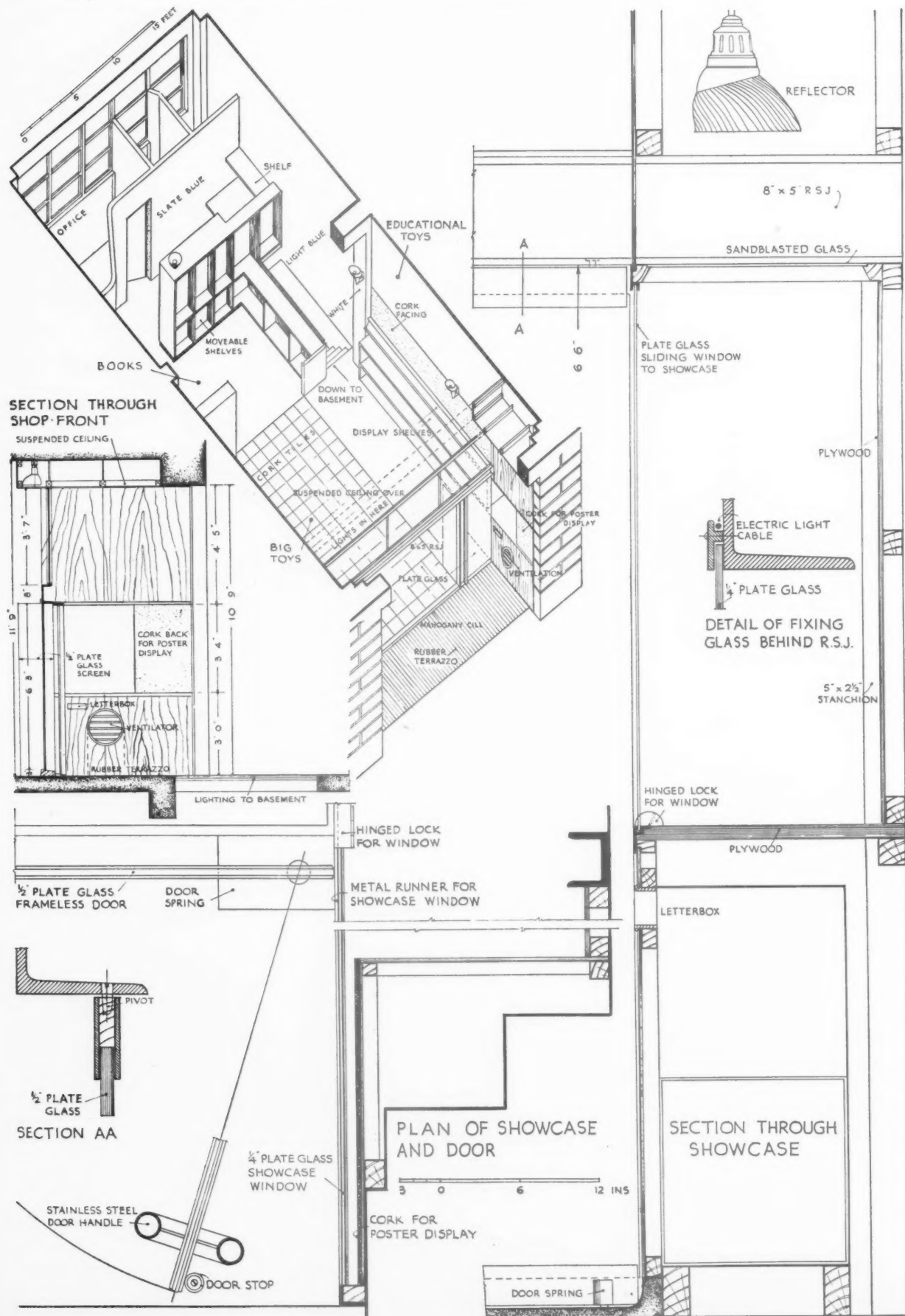
The shop is for the sale of nursery equipment, toys and books, the front of the shop being used for toy display with books further back.

The shop front is recessed 7 ft. to form a lobby for customers. Two cork backings for poster displays flank this space, and also two show-cases of mahogany ply with circular louvred vents of dark brown stained hardwood. The front is of plate glass with grey cellulosed steel surround and lettering in blue and white. Access to the shop is by a plate-glass door without a frame, having only a top and bottom rail, and hung on an automatic self-closing pivot.

Floor finishes are rubber in the entrance recess, cork tiles in the front of the showrooms, and pitch pine wood blocks at the back. Internally, one wall is painted light blue and the other white; the screen is slate blue. An axonometric and details are shown overleaf.

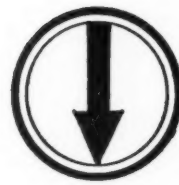
WORKING DETAILS : 588

TOY SHOP • WIMPOLE STREET, W. • ERNÖ GOLDFINGER AND G. W. FLOWER



Axonometric and details of the shop illustrated overleaf.

The Architects' Journal Library of Planned Information

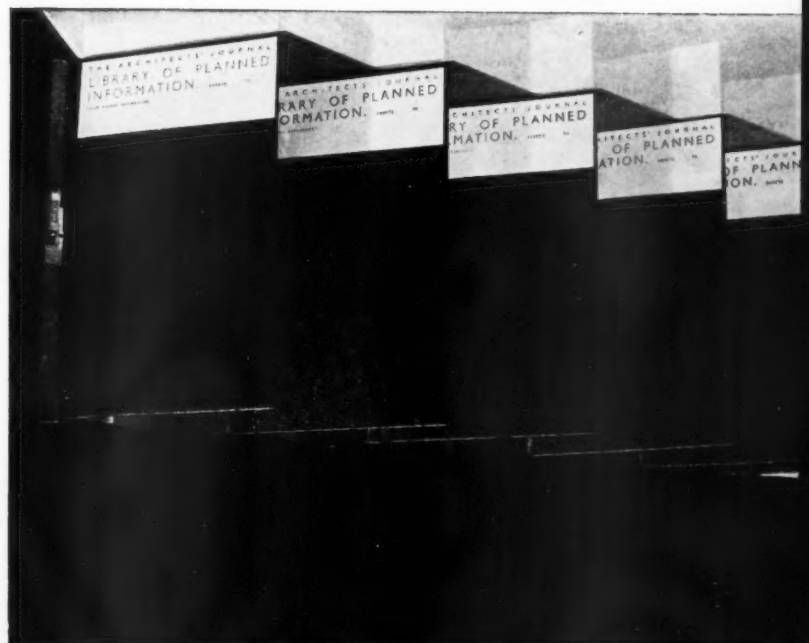


INFORMATION SHEET SUPPLEMENT

SHEETS IN THIS ISSUE

552 Sheet Leadwork

553 Kitchen Equipment



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
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- 515 : Insulation of Buildings
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- 517 : Cycle Parks
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- 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
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- 530 : Asbestos-Cement Corrugated Sheets
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- 532 : Roofing—Flashings
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- 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
- 548 : Wallboards
- 549 : Elementary Schools—V
- 550 : Elementary Schools—VI
- 551 : U.S.A. Plumbing—IV

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

DETAILS OF LEAD LINED COLD WATER STORAGE TANKS, CONSTRUCTED IN TIMBER.

The jointings in the lead lining may be done either by wiped soldering or lead burning.

TESTING:

These types of tanks should be constructed in such a manner that a thorough inspection of the underside is possible during and after erection.

Tie rod bolted through plates.

Seam in lining.
Lead burned joint.
For wiped soldering - see detail.

BEARERS:

The bearers on which the tank is supported should not be more than 15" apart.

Metal plate.

Sides and bottom built up in tongued and grooved boarding.

Framing bolted to bearer.

Tie rod encased in a lead pipe covering, burned or soldered to each end & securely fixed.

Water service take off.

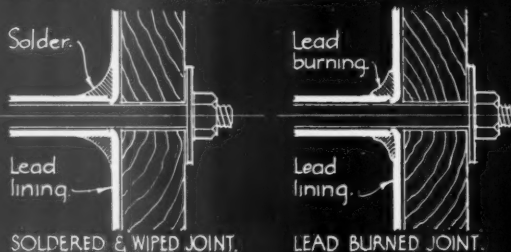
OUTLET:
For simplifying cleaning purposes the outlet is situated on the bottom of the tank and should be slightly dished.

PIPE CONNECTIONS:

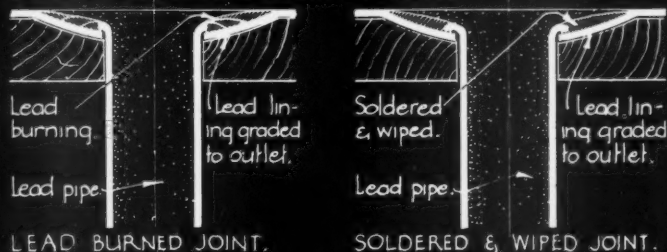
The service piping when in lead may be wiped soldered or lead burned directly to the lead lining.

ISOMETRIC DETAIL SHOWING TYPICAL ARRANGEMENT OF LEAD WORK & CONSTRUCTION OF TIMBER FRAMING.

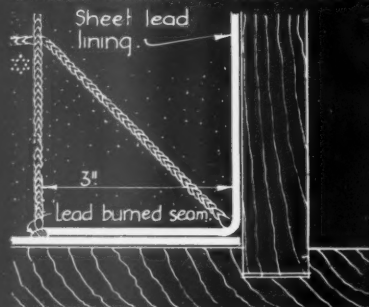
DETAILS SHOWING METHODS OF JOINTING TIE ROD COVERING TO LEAD LINING.



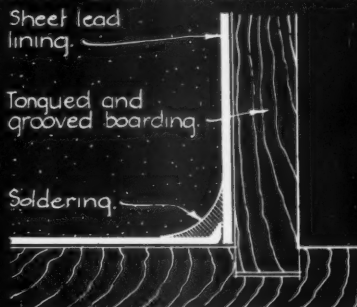
DETAILS SHOWING METHODS OF JOINTING OUTLET PIPE TO LEAD LINING AT BOTTOM OF TANK.



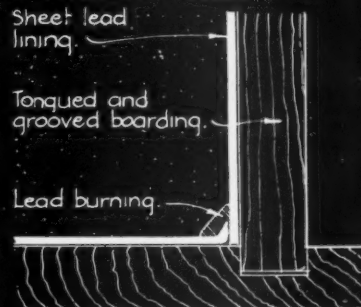
DETAILS SHOWING METHODS OF JOINTING SHEET LEAD LINING AT THE VERTICAL ANGLES.



PLAN OF LEAD BURNED SEAM MADE IN SITU IN LARGE TANKS.



WIPED SOLDERED JOINT.



LEAD BURNED SEAM USED IN SMALL BENCH MADE TANKS.

Information from Lead Industries Development Council.

INFORMATION SHEET : LEAD LINED COLD WATER STORAGE CISTERNS : N° 39 :
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON W.C1. *Drawn by A. Bayne*

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 552 •

SHEET LEADWORK

Subject : Lead Lined Cisterns

This Sheet deals with the construction of cold water storage cisterns and tanks in timber and shows the method of fixing and jointing the milled sheet lead linings to the faces of the boarding.

General :

Lead lined tanks are used for domestic cold water storage, and may be made in sizes to suit the requirements of individual dwellings, blocks of flats, offices, etc. The details shown on this Sheet and the following notes refer to tanks of normal proportions.

Design :

(a) Arrangement.

The tanks can be constructed on the site or in units in the workshop, and should be built in position on bearers or supports in such a manner that a thorough inspection of the soffit is possible during and after erection.

The isometric detail shows the position of the water service take-off a few inches up from the bottom of the tank. The water drawn from the tank is therefore free from any impurities that may have settled on the bottom.

A draining outlet is shown in a position in the bottom of the tank. This outlet, especially if dished, greatly facilitates cleaning.

(b) Timber.

Well seasoned red deal is generally used. If teak is specified it should be primed to prevent contact with the metal lining.

(c) Leadwork.

The lining should be of milled sheet lead, and since any strain on the tank is taken by the frame and not by the lining, 6-lb. lead is sufficient for almost any size tank. The protecting cover to the tie rod may be of the lightest weight lead piping available, as it is solely to prevent corrosion.

Construction :

(a) Boarding.

The sides and bottom of the tanks should be built up in well-seasoned 6-in. or 7-in. tongued and grooved boarding with a minimum thickness of $1\frac{1}{2}$ ins. The thickness of boarding should be increased proportionally for larger tanks.

The boarding to the sides should always be laid horizontally and the larger sides (which usually have the shorter sides housed in) should be extended 3 ins. to 6 ins. past the ends so as to give clearance for the external tie rods and metal plate. (Angle irons or timber struts may be used in lieu of the metal plate and vertical framing members indicated.)

(b) Strutting and Tie Rods.

In medium or large size tanks the sides should be strutted with metal or timber framing as shown on the details. Tie rods of mild steel are usually bolted to these struts or framing and screwed up to the required tension.

The external tie rods are in pairs at either end, whereas the single tie rods between intermediate supports should be spaced along the length of the tank at suitable intervals near the top edges. The

lower portion of the intermediate struts should be carried through the bottom boarding and bolted to the bearer plates as shown. These tie rods are not necessary for small tanks less than 3 ft. 6 ins. in depth or for shallower tanks less than 4 ft. in width.

(c) Internal Stays or Tie Rods.

As a general rule, one stay or tie rod should be allowed to any side over 4 ft. in length or depth. For larger tanks, they may be spaced at approximately 2 ft. 6 ins. centres horizontally, and if necessary, vertically at 2 ft. 6 ins. centres.

A $\frac{3}{8}$ -in. round mild steel bar is adequate for lengths up to 5 ft. and $\frac{5}{8}$ -in. for any greater lengths. The $\frac{3}{8}$ -in. bar should be protected by a $\frac{1}{2}$ -in. light-weight lead pipe and $\frac{5}{8}$ -in. bar by $\frac{3}{4}$ -in. lead pipe.

All iron work should be primed with red lead before erection and again after fixing.

(d) Bearers.

The bearers on which the tank rests should be spaced not more than 15 ins. apart.

(e) Frost Action.

This type of lead lined tank can withstand intermittent freezing of its contents quite adequately, but where it is known that regular freezing is inevitable, the sides of the tank should be steeply splayed, so that any pressure due to expansion will be relieved as far as possible.

Leadwork :

(a) Joints.

The joints in the sheet lead linings may be done either by wiped soldering or lead burning.

In soldering, the lining sheets are fitted into the internal angles and wiped and soldered as shown in the details on this Sheet.

In lead burning, one lining sheet is laid up to the internal angle while the sheet covering the adjacent side is dressed into this angle, lapped 3 ins. over the previous sheet and the seam lead burned as shown.

In small bench-made tanks the lead-burned seam may be made in the internal angle as shown on the third detail dealing with the vertical angles.

The jointing between the tie rod lead covering and the lead lining can be carried out similarly in either lead burning or wiped soldering, the framing or boarding being drilled from the exterior of the tank to give a slight bell to the lead lining.

(b) Pipe Connections.

Where the inlet and outlet service pipes are in lead they may be wiped soldered, or lead burned direct to the lead lining ; the framing and lead being drilled from the exterior as previously mentioned.

(c) Fixing.

The fixing of the lead lining to the vertical sides of the tank varies according to the size of the tank. For tanks over 4 ft. in depth, lead tacking is used, by one of the methods shown on previous Information Sheets Nos. 195 and 544. For depths between 4 ft. and 8 ft. a single row of lead tacks halfway up the sides and spaced at 18 ins. to 2 ft. centre to centre is adequate. The top edge of the sheet lead is dressed over the edges of the woodwork and close copper nailed.

The draining outlet pipe connection is similarly made and the boarding should be slightly dished as shown.

The lead-burned type of jointing is carried out with three different burnings as shown.

The methods of constructing these joints have been described on previous Information Sheets Nos. 195 and 544.

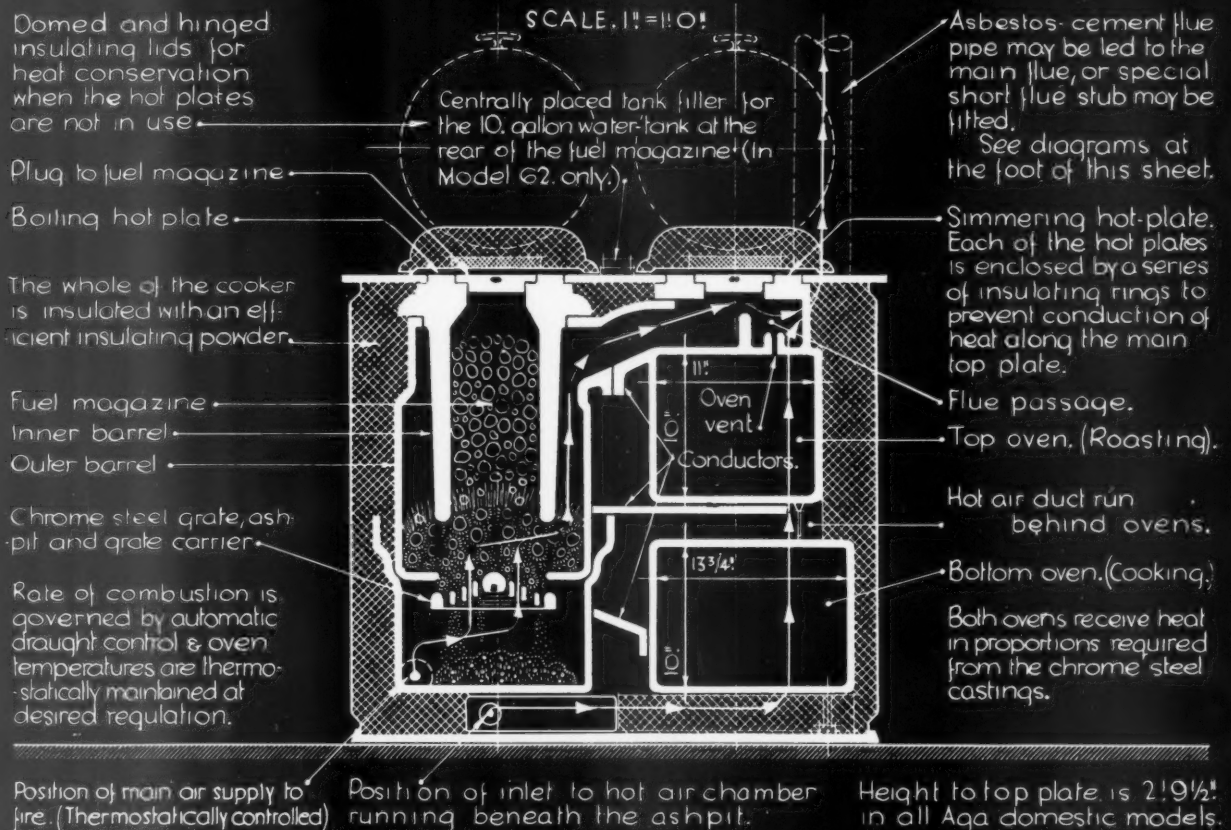
Information from : Lead Industries Development Council

Address : Rex House, 38 King William Street, London, E.C.4

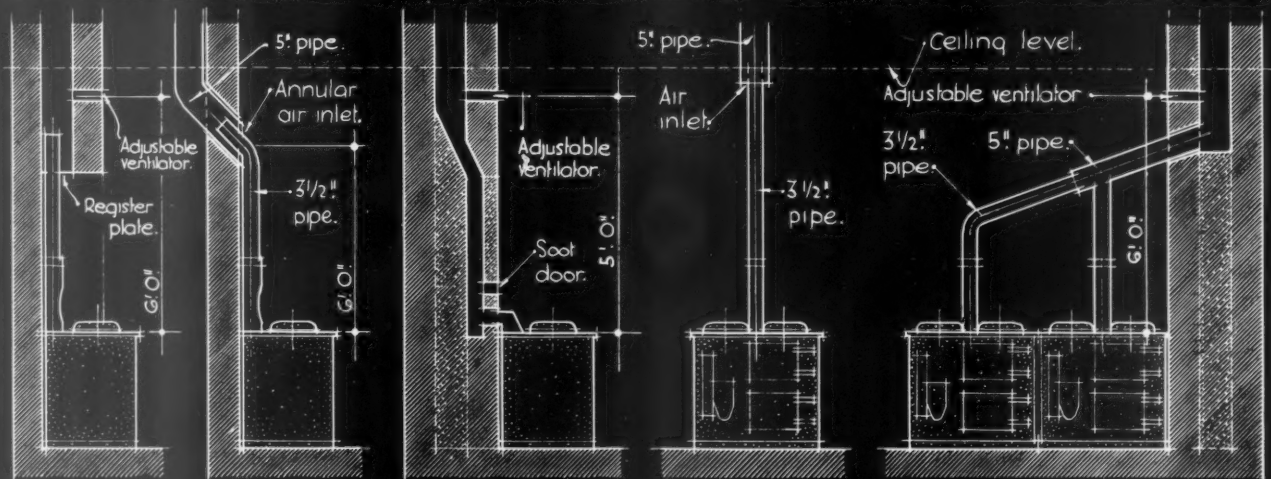
Telephone : Mansion House 2855 (3 lines)

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

TYPICAL DIAGRAMMATIC LONGITUDINAL SECTION THROUGH THE AGA COOKER. Showing working principles and arrangement of chrome steel castings, fuel magazine, the ovens, etc. Drawing illustrates Model No 62, but the same principles apply in all Aga cookers.



KEY DIAGRAMS SHOWING SUITABLE ARRANGEMENTS OF FLUE PIPES FOR AGA DOMESTIC MODELS.



1. Existing recess used. Flue pipe passes through register plate. Air inlet is placed below ceiling.

2. No brick chimney available. Any outside pipe or trunk should be wrapped or encased.

3. Existing recess converted. The recess is filled in and a 4 1/2" x 4 1/2" flue built in new brickwork to meet the main chimney.

4. Simplest arrangement. The large pipe passes right through the building. (Cooker shown in elevation)

5. This diagram shows a multiple flue arrangement for a battery of cookers. The flue pipe is increased in size where flues from additional units connect with the main pipe. Air inlet fitted below ceiling level.

Information from Aga Heat Ltd.

INFORMATION SHEET: HEAT CONSERVATION COOKERS, No 1: FUEL AND HEAT CONTROL.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET

• 553 •

KITCHEN EQUIPMENT

Product : The Aga Cooker

General :

This is the first of a series of sheets dealing with Aga cookers, and shows by means of a typical section the general principles of their operation. These cookers are designed for installation in new or existing kitchens and may replace existing ranges without structural alterations. If necessary, they may be placed in front of, or beside the old range, and various flue arrangements and types to suit these conditions are shown on this Information Sheet.

Construction :

The whole of the fire unit is manufactured from a special chrome steel alloy, while the ovens, etc., are made of cast iron. If a hot-water tank is fitted, as in the model 62, this is of copper, tin lined.

External finish is non-cracking vitreous enamel, the front and sides cream and the top black. Metal parts, including the hot plate insulating lids, are chromium plated (cream enamelled in model 47/10). Due to the insulation of the entire assembly, no external parts of the cooker (excepting the hot plates) become hot enough to cause discomfort.

Principles :

All Aga models operate on the heat storage and control principle. The entire cooker is so insulated with an insulating material that only the amount of heat needed to keep the

kitchen comfortably warm is allowed to escape. The small fire contained in the fuel magazine is sufficient to heat the heavy heat-resisting chrome steel alloy castings within the cooker, and by means of an automatic draught control, these are maintained at a specific and very high temperature day and night.

The heat from the castings is then taken by conduction and radiation to the various ovens and hot plates of the cooker, in the exact proportions required.

Operation :

The fuel recommended is small gas coke, and this is fed into the magazine through the plug in the boiling hot plate twice in every 24 hours. The fire burns continually day and night, so that the cookers are always ready for use. Ash is removed once a day through the small ashpit door. The temperature of the cooker, oven temperature, etc., is automatically maintained by thermostat.

Fuel consumption :

Automatic control of the flue speeds or draughts and the cooking temperatures, make it possible to guarantee a maximum fuel consumption for any of the Aga models. That of domestic models 35, 47/10 and 62 is £4 per annum, approx., and that of model 82, £5 per annum (based on coke at 40s. a ton).

Sizes and weights, etc. :

For details of the domestic models available, with individual uses and specifications, see Information Sheet No. 2 of this series.

The word Aga is the registered trade mark of Aga Heat, Ltd.

Name of Manufacturer : Aga Heat Limited

Address : Orchard House, 30 Orchard Street, London, W.1

Showrooms : 20 North Audley Street, London, W.1

Telephone : Mayfair 6131 (5 lines)

L I T E R A T U R E

PLANNED
INFORMATION

[By PHILIP SCHOLBERG]

The Architects' Journal Library of Planned Information. Volume III. Edited by Sir John Burnet, Tait and Lorne. London: The Architectural Press. Price 21s.

IN every architect's office every day of the year brings its crop of leaflets, circulars, handsome and expensive brochures, samples, and the odds and ends which manufacturers are optimistic enough to call literature. Half of it, of course, goes straight into the waste-paper basket, and the rest, all shapes, colours and sizes from postcard upwards, joins the miscellaneous collection that is always going to be properly filed as soon as someone has five minutes to spare, what time advertising managers check off inquiries and analyse them seven ways in the sacred name of market research.

But is the architect really so full of sales resistance; is he really on a par with the timid suburban housewife who must be cajoled with subtle blandishments into paying the first instalment on a vacuum cleaner? Manufacturers maintain that architects are shy and remote—"difficult to get into"—but every architect knows that the rumour of a big contract will release a pack of high-pressure salesmen, many of whom will only be scouting around in a social sort of way with a real expert in the background if the architect seems likely to be interested. Why, as Burnet, Tait and Lorne asked so plaintively some four years ago, "Why not send the expert in the first place?—he is the only man we want to see."

What goes for salesmen surely goes for catalogues too. For every material and item of equipment the architect wants to know what it does and how it should be used, and the number of requests for further information which a manufacturer receives (assuming of course that he has a product worth selling) is not a measure of the success, but of the failure of his catalogues, which should, ideally, leave the architect with nothing more to do but modify a suggested specification to suit the needs of the job he has in hand. "Whatever has little value in the draughting room has little value anywhere else"—Burnet, Tait and Lorne again. Hence their original Information Book—hence too the information sheets which have been published weekly in this JOURNAL ever since the autumn of 1933.

The volume now under review contains all the sheets which were

published during 1936, and, while this arrangement may seem somewhat arbitrary for a series which forms a steadily increasing whole, any other plan (publishing in hundreds for instance) would be equally open to criticism. In the three volumes now published, it is therefore inevitable that for a given subject the relevant sheets may be in three different places, but this difficulty is largely overcome by publishing a cumulative index at the beginning of each volume so that every sheet published can be found by consulting only one index. The result is fairly large, ten double column pages containing some 1,500 odd headings, but an index that is too small is worse than useless.

Of the sheets themselves, it is enough to say that they have been drawn up from the architects' point of view and that a standardised form of presentation has for years been the most crying need where catalogues are concerned. In subject matter, some of the sheets will obviously be in far more regular use than others, but the less common items of information seem nearly always to be needed more urgently and to be correspondingly difficult to find, so that in a year's working the sheets probably work out about even in value. The range covered is wide. L.C.C. height regulations, telephone cabinets and gymnasium data are but three random choices: there are, however, some gaps—several sheets on wooden windows but none on metal—several on roofing tiles but none on slates—half a dozen or so on swimming pools, but none on filter plants for them—but one cannot be unduly captious about a book that is continually growing; the gaps will doubtless be filled as time goes on.

MERSEYSIDE

[By E. H. W. ATKINSON]

The Future of Merseyside: Town and Country Planning Schemes. By W. G. Holford and W. A. Eden. Liverpool: The University Press. Price 2s. 6d. net.

THE notion of regional government, and not before it is high time, is being brought cautiously into the field of discussible, if not yet quite practical, politics. The report of the Royal Commission on Local Government in the Tyneside Area, which suggests a division of responsibility for services demanding area-wide control on the one hand and for more purely local services on the other hand, has

been sent to the associations of local authorities to study; little though that may mean in actual practice for years yet, it is very much to the good that members of local authorities should have such considerable proposals thrust on their notice. The approach of the Tyneside Commission, of course, was over the whole local government field.

Professor Holford, who occupies the Liverpool Chair of Civic Design, and Mr. Eden, working here under the ægis of the Statistics Division of the Social Science Department of the University of Liverpool, have approached the problem from the planning aspect. They find that planning, in the real sense of the term, is impossible without a radical change in the present system of local government. Their conclusions are soundly based on a thorough and indeed brilliant study of the present state of town-planning on Merseyside. A very patchy state of affairs is disclosed. Ill-directed movements of population, over-compartmentalized planning, and, in important particular, all the evils that arise from the conflict between an authority's duties in planning and in rating, are all having their effect and are here displayed in the illogicality which either the current means, or the current will, to plan have produced.

An *ad hoc* Planning Commission, as a solution of the problem, is turned down because it would have no control over other matters of local government, as for instance, housing, supply services and transport; nor would it affect the incidence of the rates burden as between one authority and another; and it might be, or appear to be, undemocratic. Professor Holford and Mr. Eden turn, therefore, to the alternative of a regional government embracing an area of some 207 square miles, with a population of a million and a half, and a rateable value of £10½ millions. Its greatest advantage, they urge, would be that it could equalize the rates, after a term of years, as between one area and another, and remove the temptation to increase rateable value at the expense of amenities.

Four county boroughs, ten urban districts and parts of two rural districts are in the area indicated. If the Holford-Eden suggestion were worked out in practice the area would have its planning and housing, as well as its publicly-owned supply and transport services under the central authority; essentially this would be the primary rating authority for all matters of local government within the region. The new body would therefore have more powers than are possessed by the London or any other county council. Efficiency and general convenience would seem to dictate the continuance in office and working order of the

existing councils, who would have voted to them by the regional council the money they needed. But planning and the buying of open spaces would naturally remain in the hands of the regional council.

This is the barest summary of a bold set of proposals. But it may be enough to show at once their logic and integration, and to indicate some of the difficulties in their way. For local administrators' minds are not commonly guided entirely by logic or undiluted reason. But the principles suggested by the stimulating study are of more than local validity and should be brought forcefully into the discussions on local government that are now arising. And the sooner they become practical politics the better.

NORTHUMBERLAND AND DURHAM

[By R. D. TURNBULL]

Shell Guide to Northumberland and Durham. By Thomas Sharp. Batsford. Price 2s. 6d.

THE expediency of treating the two counties of Northumberland and Durham in one guide is doubtful: one would expect such a course to be adopted only if the size and interest of the area permitted, not because by doing so "we are therefore treating one social and economic unit." But in spite of a compression which will seem undignified to any Northumbrian, Mr. Sharp points the way sensitively and with taste.

It is probably too much to expect that everyone will be satisfied: they will find it most useful who move rapidly from place to place seeing a ruined castle in one place and a peel tower in another, and it is those who move leisurely up valleys and over moorland who are more likely to "discover" Northumbria.

To one Northumbrian castles and other antiquities are too much stressed. This is particularly noticeable in the treatment of the Roman Wall, for in spite of saying of the Wall "so much has been written that it is not necessary to describe it in any great detail here," Mr. Sharp nevertheless deals with it to the extent of fully half the section devoted to Northumberland. Valuable space would have been saved for the less-known areas if conscientious passionate antiquarians had been left to study one of the recommended guide books on the subject. Moreover, the predominance given to this subject will be misleading to the stranger. The average motorist will find North Northumberland equally interesting and even more beautiful. For this area Belford is, as Mr. Sharp says, "a good centre." In a few minutes the motorist

can drive on to the Kyoie Crag, where he may look down the long coast line to Dunstanburgh Castle and over the sea to Holy Island and the Farnes. In the opposite direction lies the Till Valley, its green freshness a remarkable contrast to the brown moorland which rises up to Cheviot. Better still, if the traveller stays at Belford, he can walk.

This is one of the few guides which does not continuously focus the reader's attention on "local beauty spots" or places of historic interest, for while it does much to dispel the popular belief that the North is a land of coal mines and pit heaps, one is not allowed to forget that here, too, is a triangle of industrial desolation. Here the selection of illustrations is splendid. Moorland, pastureland and country villages are contrasted with the extreme squalor of other parts, so that although the tourist approaching Newcastle through Gateshead may shudder, he must realize that he has not seen the worst. But even the best photographs fail to give any adequate conception of some districts: therefore, those who do not know industrial depression should visit Jarrow: it is not far out of the way.

ÆSTHETICS

[By HERBERT GRIMSDITCH]

Art and Understanding. By Margaret H. Bulley. Batsford. Price 15s.

THE subject of æsthetic values is one which must appeal to all reflective minds which have contact with the arts. The superficial æsthete is content to appreciate, to luxuriate in his enjoyment of beautiful things, without inquiring very closely as to the source of his enjoyment. Such a type may be a connoisseur, even a connoisseur of faultless taste, but in no wise does he fulfil the function of a critic—which is twofold, consisting first in appreciation and second in exposition of the reasons behind that appreciation. The critic's aim is, or should be, to add to the number of the elect by educating the reader to see the light.

To this category Miss Bulley undoubtedly belongs. She has proved it by a series of books written to persuade and to demonstrate by example. Just how far she is likely to succeed is questionable, however. One thing she has here done with rare skill, and that is to assemble a large series of illustrations in which good and bad examples of cognate subjects are placed side by side and commented on in the text. The range and comprehensiveness of these 275 plates are remarkable; and, so far as taste is concerned, this reviewer has found hardly half a dozen examples on which he would quarrel

with the author. One of them may be worth citing to illustrate a general proposition. Miss Bulley contrasts a Kauffer poster with what I consider to be a singularly beautiful and well-composed photograph by D. M. Laing, to the disparagement of the latter. "The photograph," she writes, "... is seen to be devoid of life, for a delicate apprehension of nature has been denied free reflection by an insufficiently yielding technical process." You see ... but, like the caterpillar in "Alice," I *don't* see. What I *do* see here is a critic confronted with beauty produced by the intelligent manipulation of a mechanical process and forced by preconceived theory to deny that beauty.

Such cavils, however, are but by the way; and Miss Bulley's selection and juxtaposition of illustrations ranging from the Forth Bridge to *amorini* by Donatello is most skilful and illuminating.

The general argument of her book, alas, merits neither of these descriptions. So far as I have been able to disentangle it from a semi-mystical mass of considerable size, its chief points are that the essential thing in art is the presence of an idea, and that there is no such thing as good or bad art, but only art and counterfeit. But as to the nature of this all-pervasive idea I must confess that I am still in the dark. Liberal and not always relevant quotations from Coleridge, Voltaire, Ecclesiastes, Picasso, Ruskin, Goethe, Jacob Boehme, Professor Whitehead and Dr. Inge—to name a few at random from hundreds—does not help, but only darkens counsel. Coming to this book after reading a logically built-up structure like Walter Abell's "Representation and Form," I can but regret that Miss Bulley does not discipline her indubitable taste and talent by the salutary control of arrangement.

Nor can I see eye to eye with her on the division of works appealing to the visual sense into "art" and "counterfeit." Surely there is no such absolutism, but rather a graded progression. To take an illustration from poetry, one might say that there was a downward scale through Shakespeare, Keats, Byron, Pope, Crabbe and Mrs. Hemans. Or in painting from Turner through Cotman, Reynolds, Girtin, Burne-Jones, Frith and Leighton. Where, in either case, would Miss Bulley draw her line between art and not-art? I should not like to take the responsibility of drawing it.

These matters of why and wherefore in the appreciation of works of art lead us into deep waters. And, despite her learning and taste, Miss Bulley tends to flounder about in them instead of steering a steady course.



City 1960, a design by Norman Bel Geddes. [From the "Architectural Forum."]

PERIODICALS

JULY ANTHOLOGY

AMERICA

American Architect

(Monthly, \$1.00. 572 Madison Avenue, New York)

JULY. A good railway station at Hamilton, Ontario, by Fellheimer and Wagner, railway train interiors by Paul Cret (see illustration); photographs of traditional Irish architecture; notes on summer air-conditioning by J. C. Hardigg; a 12-page portfolio of singularly unfortunate tombstones and mausoleums containing one good one from Plymouth, Mass., dated 1807. Twelve pages of exceptionally useful data on auditorium seating and horizontal sight-lines.

Architectural Forum

(Monthly, \$1.00. 135 East 42nd Street, New York)

JULY. More re-modelling schemes, mostly successful, one or two frightful; Planning Techniques deals well this month with drug stores; good notes on two prefabricated houses, one in steel and one in copper-covered plywood; City 1960, a design by Norman Bel Geddes, for a population of 15,000,000 (see illustration).

Architectural Record

(Monthly, 50 cents. 115 West 40th Street, New York)

JULY. Isotype symbols as applied to architecture and town-planning, an illustrated article by Dr. Otto Neurath; additions, remodellings, new jobs, and a 40-page review of hospital needs by Dr. Haven Emerson, plenty of illustrations and plans, and a very thorough bibliography.

Pencil Points

(Monthly, 50 cents. 330 West 42nd Street, New York)

JULY. Richard J. Neutra, 31 pages of photographs and captions illustrating his work, with an article by Henry Robert Harrison, good photographs but hardly any plans; the usual sketches and data sheets and some photographs of not very good sculpture.

FRANCE

L'Architecture

(Monthly, 8 fr. 51 Rue des Ecoles, Paris 5^e)

JULY. Further notes on the Paris Exhibition, concerned mainly with the bridges and towers, some of which are amongst the most exciting things in the show; the Lycée at Metz, by Parisot and Millochan, severe but pleasant internally; the Collège Franco-Britannique in the Cité Universitaire, by Pierre Martin and Maurice Vieu, an all-too-dutiful exercise "directement inspirée par les collèges anglais."

La Technique des Travaux

(Monthly, 10 fr. 54 Rue de Clichy, Paris, 9^e)

JULY. A maternity home at Charlevoix arranged both for paying and non-paying patients; a long illustrated article on the Paris Exhibition; details of recent modernization work carried out by the Paris Métro; notes on calculations for arched structures fully restrained at both ends.

GERMANY

Baukunst und Städtebau

(Monthly, 1 m. 90. Bauwelt Verlag, Berlin, S.W.68)

JULY. Two schools by Ernst Pietrusky, one at Ober Weistritz, the other at Schön-Elguth; housing schemes at the Düsseldorf Exhibition, and a pair of semi-detached houses by Werner Harting, all of which appeared in *Bauwelt* during June; eight pages of good, simple furniture in wood.

Baumeister

(Monthly, 3 m. Georg Callwey, Munich)

JULY. Thirty-four pages by Benno Schachner on hospitals, layout, planning and equipment, illustrated by several recent jobs; a large house near Stuttgart, by Hans Schmol; some good working details of the jobs illustrated and two pages of heating stoves for housing schemes.

Bauwelt

(Weekly, 90 pf. Ullstein Verlag, Berlin, S.W.68)

JULY 1. Defence against gas attack, a two-page article; eight pages on housing



An interior by Paul P. Cret for the Atchison Topeka and Santa Fé Railroad. [From the "American Architect."]



A grandstand for a football stadium by Borgstrom and Lind.
[From "Byggmästaren."]

schemes at the Düsseldorf "Creative People" Exhibition.

July 8. Schemes submitted in competition for a new youth hostel near Fulda, won by Diether Hoffmann; a data sheet on asbestos-cement ducting; war memorial gardens.

July 15. The new Museum of German Art in Munich, with some notes on the present state of the arts in Germany.

July 22. Two more pages on gas defence; a country house built by Walter Kratz for his own occupation—plenty of photographs, plans and detail drawings.

July 29. The reinforcement of large-span beams—an article by Paul Hallensleben; a barge-loading station in Berlin, by Paul Baumgarten (see illustration), an excellent and well-planned piece of work.

Deutsche Bauzeitung

(Weekly, 3 m. 40 per month. Beuthstrasse 6-8, Berlin, S.W.19)

July 7. A remodelling job in Berlin, by Hermann Mohr; timber building costs.

July 14. The layout of housing estates, article by Walter Baugert; drawings of a dressing-room by Fritz Schleifer.

July 28. A housing estate at Freiburg, by Dr. Salzmann; layout for a garden exhibition to be held in Essen in 1938.

Innen Dekoration

(Monthly, 2 m. 50. Alexander Koch, Neckarstrasse 121, Stuttgart)

July. The Museum of German Art at Munich, eight pages of illustrations, no drawings; the German pavilion in Paris, two photographs; recent pictorial wallpaper designs by Salubra; new furniture, by Eugen Buschle.

Moderne Bauformen

(Monthly, 3 m. Julius Hoffmann. Paulinenstrasse 44, Stuttgart)

July. "Architects' Guide to Paris," with a list of buildings classified under both type and age with a map to show where they all are, a good idea, well executed, but with one or two surprising omissions from the buildings listed; the Düsseldorf Exhibition,

articles by Peter Grund and Emil Fahrenkamp, who were jointly responsible for the exhibition—plenty of photographs and plans of the small houses; tables, chairs, mirrors and lamps—recent designs by the Deutsche Werkstätten.

HOLLAND

Bouwkundig Weekblad Architectura

(Weekly, 15 florins per annum. Weterings-hans 102, Amsterdam)

July 3. Street, square and garden decorations in Amsterdam.

July 10. St. Paul's Church at Utrecht, by G. C. Stuyt, and a flat block in Antwerp, by Léon Stijnen, photographs and isometric.

July 17. Architecture at the New York 1939 World's Fair.

July 24. Four large new road bridges at Arnhem, Nijmegen, Moerdijk, and Vianen, an illustrated article by H. Wagenaar.



A barge loading station by Paul Baumgarten; goods pass vertically from the barges to the lorry deck above. [From "Bauwelt."]

de 8 en opbouw

(Fortnightly, 30 cents. Amstel 22, Amsterdam, C.)

July 3. A row of five very interesting terrace houses, by van Tijen, Stam and Beese, photographs and plans.

July 17. Street decorations in Amsterdam, by various architects; a good deal more spontaneous than many of our London efforts.

July 31. The Rotterdam Lloyd's motorship "Weltevreden," an excellent job by architects van Gelderen and Gidding.

ITALY

Architettura

(Monthly, 18 lire. Via Palermo 10, Milan, 1)

June. Nearly a complete number devoted to the "Summer Holiday and Child Welfare" Exhibition in Rome; plenty of photographs and a few plans; notes on New York skyscrapers.

SWEDEN

Byggmästaren

(Weekly, 20 kr. per annum. Kungsgatan 32, Stockholm)

No. 22. A new football stadium and grandstand, by Borgstrom and Lind (see illustration).

No. 23. A composite building in Stockholm, by Adrian Peterson—flats, offices, and a cinema on the ground floor; another cinema with offices, by Gustaf Clason.

No. 24. The rational use of concrete in house design—article by Emrik Lindman.

Form

(10 issues per annum, 10 kr. Nybrogatan 7, Stockholm 7)

No. 6. The Paris Exhibition—plenty of good photographs and full details of the Swedish pavilion.

SWITZERLAND

Schweizerische Bauzeitung

(Weekly, 1 fr. Dianastrasse 5, Zürich)

July 3. A tram and bus garage in Zürich, by Edward Egli, good photographs, plans and sections; a church at Beinwil, by Armin Meili.

July 10. Recent railway carriages, including some new light steel coaches for the Etat railway; competition designs for a new Zurich casino, won by Dr. Roland Roher.

July 17. A scheme for a motor road under the St. Bernard pass; a school competition result.

July 24. An appreciation of Walter Mittelholzer and his work for Swissair; a house and studio near Zurich, by Hans Suter.

July 31. A school near Lucerne and a bungalow and boathouse at Meggen, both by Armin Meili.

Werk

(Monthly, 3m. 50. Muhlebachstrasse 59, Zurich)

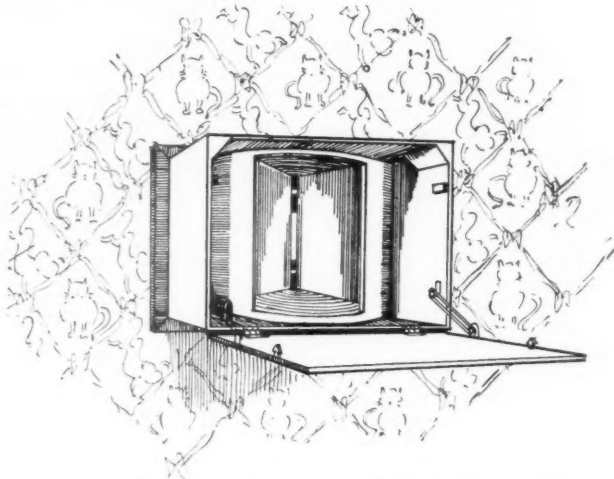
July. A large office building in Basle for the firm of Hoffmann, La Roche & Co., by Otto Salvisberg, photographs, plans and many detail drawings.

can deliver parcels with some hope that they will still be there when the tenant gets back in the evening. The main part of the device is the circular drum, which has three adjustable divisions to make compartments of different size. Tradesmen open a door in the outside wall, put the milk or whatever it may be into the compartment and turn the drum until the next compartment appears. There is a ratchet on the spindle to prevent the drum being turned backwards, and after three deliveries have been made the outer doors are automatically locked, and can only be released when the parcels have been cleared from inside the kitchen. Whether or not the average tradesman's delivery boy will ever have the intelligence to use a gadget like this I do not know, but I can see a probable demand from speculative builders who want a selling point the next man hasn't got, and architects may even have clients who want something like it. And the makers have taken the trouble to arrange it so that it will go neatly into five courses of brickwork; depth from front to back is 20 ins. (*Easiwork, Ltd., 242 Tottenham Court Road, London, W.1.*)

Sheet Steel Fittings

Elsewhere in this issue, on pages 366 to 369, are described the experimental flats in Battlebridge Road, at the north-west corner of King's Cross station. Built to the designs of Mr. John Dower for the Sheet Steel Market Development Committee (an offshoot of the British Steelwork Association), these flats are intended to be purely experimental, and are to be used for research into the possibilities of sheet steel for housing work. Dovetail sheeting has been freely used for such things as floors, ceilings, partitions and beam casings, but I was particularly interested to see pressed steel baths, lavatory basins and sinks. The illustrations overleaf show a typical bathroom and kitchen, though the bath shown is of the normal cast-iron type with a sheet steel front panel.

These fittings, I believe, were originally imported from Armco Iron in America, where pressed steel has been used for jobs like this long enough for most people to take it for granted. There is no reason at all why pressed steel should not be used for baths and lavatory basins, but will the vitreous enamel finish stand up to rough use in a combined sink and draining board? One cannot tell as yet, but awkward things may happen if the finish gets chipped. The lavatory basin shown is quite a normal shape, and the cupboard beneath it ties it up nicely—a good fitting. The baths are pleasant to look at, though they are somewhat broader and a little shallower than the usual cast-iron type, and the bottom of one of them has a series of longitudinal ribs about $\frac{3}{8}$ in. deep and an inch or so wide. The result looks rather surprising, but the ribs presumably give a certain amount of extra strength and a slightly non-skid surface to prevent people slipping as they get in and out, quite an easy thing to do, as the bottom is both flat and wide. Apart from these small differences, which are probably only noticeable because baths have been exactly the same for so long, there is nothing to distinguish these fittings from the normal type; they



TRADE NOTES

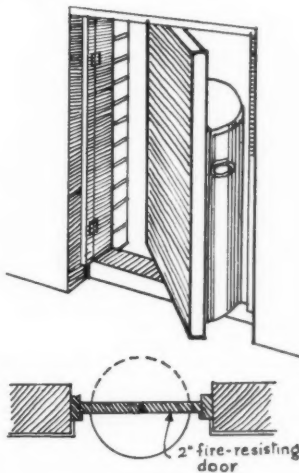
[EDITED BY PHILIP SCHOLBERG]

Simplified Refuse Disposal...

NOW that so many small flats are occupied by tenants who are out all day, the problem of collecting rubbish is becoming more and more acute, especially as most of these flats are centrally heated and do not possess the usual long-suffering boiler to be fed indiscriminately with eggshells, potato peel and wet newspapers. Various methods have been tried, the refuse chute with an opening on each floor working as well as any, but this has, or is thought to have, a "working class" air about it, and has never, so far as I know, been applied to housing for the black-coated worker. Sloane Avenue Mansions was one of the first blocks in which any real thought was given to the problem, and there Mr. Green had built-in bins placed against the corridor wall with access from outside so that the porter could empty them when the tenant was out.

A modification of this arrangement has recently been produced by the Compactom people, who mount a semi-circular bin on a revolving panel which can be swung so that the bin is outside in the corridor, or near the back door of the small house. The sketch (right) shows the general arrangement, the overall size of the panel and frame being 2 ft. 11 ins. high by 2 ft. 1½ in. wide, and the manufacturers suggest that it may also be built into the door, though this would seem not only unkind to the hinges, but also asking for trouble if the door has a partition wall running at right angles to it. The device would seem quite easy to fix in the average flat, but it will

need pretty efficient and speedy service from the porter. Admittedly he can see at once which bin needs emptying and which doesn't, but he will have to do a whole lot of work quite quickly or tenants will be wandering along corridors lined with bins dutifully reversed by their departed



owners. Better for the small house than for the flat block, I think. (*Compactom, Ltd., 113 Regent Street, London, W.1.*)

... and Easier Food Delivery

The drawing at the head of these notes shows the other aspect of the same problem, for it is an arrangement whereby tradesmen



A typical bathroom and a typical kitchen in the demonstration flats at King's Cross. See note overleaf.

are not tinny or noisy, and their appearance is good.

But before manufacturers start gaily out on the large scale production of these fittings, there are one or two points to which they ought to give a lot of thought. Every architect knows those ultra-cheap miniature bathroom cupboards, tinny, badly enamelled, and so light that the inevitable rusting of the hinges means that the whole thing gets pulled bodily off the wall before very long. The public knows all about them by now and the slightest suggestion of shoddy workmanship will mean whole-hearted disapproval for these newer units. One cannot expect all cupboard doors to shut with the satisfying snick of a refrigerator, but they must open easily and be free from all resonance, or the public will keep on using wood. These American fittings, in their present state, are just about good enough, but they will get hard wear in kitchens and bathrooms, and the doors, being below waist level, will seldom be shut by anything but a kick.

On the design side it is to be hoped that manufacturers will remember the stainless sink. Here the manufacturers waited long enough to decide exactly what a sink ought to be, and as a result they produced something which sold not only for its stainless virtues, but because it was very much better as a sink. I do not know that the logical form for a bath or a lavatory basin ought to be very much different from what it is now, but the technique of pressing instead of casting is certain to produce minor modifications in form (I suspect that the differences in the American bath are largely due to this factor), and it would be well worth while paying a good fat fee to a first-class industrial designer if he could arrange these modifications so that they produced a better bath.

But the dies for producing units of this kind are fortunately going to cost a great deal of money, so that manufacturers, for their own sakes, will be forced to think before they leap. If they take enough

trouble about design in the early stages there is no reason why pressed steel should not be accepted as readily as any of the more traditional materials. (*The Sheet Steel Market Development Committee, Steel House, Tothill Street, London, S.W.1.*)

Manufacturers' Items

For filing B.O.C. technical booklets, the British Oxygen Company supply on request a serviceable patent Napierian rod binder. This measures 10½ ins. by 7½ ins. wide, and is 1½ in. in thickness. Bound in maroon with gold lettering, the binder provides a simple means for preserving the technical booklets for ready reference. Binders will be supplied free upon application to the nearest local works of the Company.

In the section devoted to metal spraying on The British Oxygen Company's Stand No. 9, Row F, at the Welding Exhibition, to be held at Olympia from September 16 to 22, a complete metal spraying plant will be in use. This will consist of the pistol (special nozzles of the rotary extension and deflector types will be exhibited near at hand), cylinders of oxygen and hydrogen, tubing, regulators, and an Ingersoll Rand Type No. 30 air compressor. A small lathe is to be employed to demonstrate the building up of worn parts by the use of the pistol. These demonstrations will include the deposition of high and low carbon steels as required in the rebuilding of such parts as crankshafts, stub axle pins, ball-race journals and housings.

The liability of blues and greens to fading is so well known that there should be a considerable demand for Monastral Fast Blue B.S., a patented pigment produced by the British Dyestuffs Corporation, a subsidiary company of Imperial Chemical Industries, Ltd.

For wallpapers and coated papers of all kinds the pigment should, it is claimed, be thoroughly suitable, for it is fast and non-bleeding in alkaline casein size, fast to the action of lime in newly-plastered walls,

fast to light and of good solidity. The same essential virtues are to be found also in distempers made with the same pigment.

Two new bulletins issued by the Clay Products Technical Bureau of Great Britain deal with the "Re-use of Salvaged Brick" and "Mortar Composition and its Influence on the Compressive Strength of Brickwork." The former gives a comprehensive account of the disadvantages of re-using salvaged brick. As summarized in the bulletin disadvantages are considered under the headings of: Surface properties, Uniformity of type and dimensions, and contamination, in which respect the use of salvaged bricks in brickwork is liable to entail:—

- (a) Poor bond, questionable weathertightness and variable quality in the finished brickwork.
- (b) Extra expenditure on mortar and labour in laying.
- (c) Appreciable costs in making good or disguising the results of contamination.

The bulletin concludes with notes on the use of crushed brick as an aggregate for concrete and on the repair and repointing of existing brickwork. The second bulletin is in the form of abstracts from a paper presented by Dr. N. Davey, M.INST.C.E., etc., of the Building Research Station, at the London Congress of the International Association for Testing Materials extracted (by permission) from the Congress Book of the London Congress for Testing Materials, 1937, with annotations by the Clay Products Technical Bureau.

Following are some extracts from a letter from Messrs. Wheatly & Co., Ltd.: "Please note that, for family reasons only, we are forming a Private Limited Company, which will continue in business under the style of 'Wheatly & Co., Ltd.', and which will carry on all the business activities previously conducted by Wheatly & Co. The Chairman of Directors will be Mr. J. A. Tomlinson, and the Managing Director, Mr. Leslie G. Tomlinson. Mr. E. E. Tomlinson has also been appointed to the Board. There will be no changes whatever in the management."

Surface Protection and Decoration is the title of a brochure just issued by the Indestructible Paint Co., Ltd., of Cleopatra Works, Park Royal, London, N.W. The brochure, price 6s., is divided into five sections, as follows: 1, interior wall and ceiling surfaces; 2, exterior wall surfaces; 3, maintenance schedules; 4, general notes; 5, reference list of products. In the foreword the firm state that "the brochure has been prepared for architects, surveyors and maintenance officials as a guide to the preparation of painting specifications under normal and abnormal conditions. It is arranged with the data classified under surface headings because we believe that the ordinary catalogue, however comprehensive, is only really effective for reference purposes if the reader is previously familiar with the materials mentioned and with their different uses."

"Paint is not a temporary surface treatment but a lasting decorative and protective medium, and should not be judged by its initial cost but by its cost per yard per annum of effective protection. By specifying a good quality paint maintenance costs can be considerably reduced. It is important, however, that all surfaces should be carefully prepared and the material correctly applied by competent craftsmen, for even the best paint cannot give the best results with poor workmanship."

"Our products are all prepared from scientifically tested materials and formulated with the object of obtaining the greatest durability. During the past seventy years we have acquired a high reputation for quality among architects, surveyors and property owners, with whom we are always ready to co-operate in the preparation of painting specifications and specimen colour schemes and in any matters requiring technical or practical assistance."

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICT (15 MILES RADIUS)

FINCHLEY. *Flats, etc.* Messrs. Petch and Feraud are to erect 11 shops and 11 flats in Regents Park Road, Finchley.

FINCHLEY. *Flats.* Mr. Alan W. Pipe is to erect flats on the site of the Baptist Church, Station Road, Finchley.

FINCHLEY. *Flats.* Mr. E. William Palmer is to erect 16 flats in Holden Road and Avondale Avenue, Finchley.

FULHAM. *Housing.* Fulham B.C. has prepared a scheme for the clearance of the properties in The Avenues Redevelopment Area, at a cost of £195,000. A tentative scheme of redevelopment for the portion of the area to be utilized for the erection of dwellings has been prepared from which it appears that it will be possible to provide, in five-storey blocks, some 485 flats.

ILFORD. *Flats.* Messrs. Rowe and Robson are to erect eight flats in Netley Road, Ilford.

ILFORD. *Shops, etc.* Mr. G. F. Siegerts, architect, is to erect shops and offices in Roden Street, Ilford.

LADBROKE GROVE. *Hospital Improvements.* The L.C.C. is to improve St. Charles' hospital, Ladbroke Grove, at a cost of £4,830.

SOUTHERN COUNTIES

AYLESFORD. *Schools.* Kent Education Committee is to acquire additional land adjoining the Central School site, so as to make it possible to provide on the site an infants' and junior school as well as a Central School at Aylesford.

BEDDINGTON. *Fire Station.* Beddington and Wallington U.D.C. is to erect a fire station at a cost of £15,340.

BRIGHTON. *School Extension.* Brighton Corporation is to extend the Warren Farm Schools at a cost of £10,603.

DARTFORD. *Hospital Extensions.* Kent C.C. is to purchase properties adjoining the County Hospital, Dartford, for residential purposes by members of the hospital staff and the possible extension of the hospital.

KENT. *Hospital Accommodation.* Kent C.C. reports that it will be necessary to provide, over a period of years, considerable new accommodation in order to provide a comprehensive hospital service for the county. The capital costs involved in carrying out the proposals indicated are estimated at about £1,347,000, exclusive of sites and equipment, made up as follows: Extension of 250 beds at the County hospital, Farnborough, £200,000; new 600-bed hospital in the Dartford area, £510,000; extension of the county hospital, Sheppey, to 150 beds, £20,500; a new institution at Sittingbourne to provide 150 sick beds (cost of these beds only is given), £82,500; extension of the Coxheath institution to 200 beds, £16,000; remodelling of the Cranbrook institution, £15,000; a new hospital of 400 beds in the Medway area, £340,000; the extension of the Blean institution to accommodate 100 sick beds, £18,000; provision of 150 convalescent beds, £45,000.

KENT. *Schools.* Kent Education Committee is to erect schools at Bexleyheath and Chislehurst, and enlarge the schools at Brenchley and Hawkinge.

LENHAM. *Sanatorium Buildings.* Kent C.C. is to erect new buildings at Lenham sanatorium at a cost of £22,000.

MAIDSTONE. *Tuberculosis Dispensary.* Kent C.C. is to erect a central tuberculosis dispensary at Wren's Cross, Maidstone, at a cost of £5,700.

MALLING. *Casual Wards.* Kent C.C. is to erect new casual wards at Malling Institution at an estimated cost of £3,350.

MEDWAY. *Children's Home Buildings.* Kent C.C. is to erect a central kitchen and a combined recreation and dining hall, at the Medway Children's Home, at a cost of £4,950.

MEOPHAM. *School.* Kent Education Committee has purchased a site at Meopham for the proposed central school.

PEMBURY. *Hospital Extensions.* Kent C.C. is to remodel and extend the casual wards at the County Hospital, Pembury, at a cost of £2,250.

TUNBRIDGE WELLS. *College, etc.* Kent Education Committee is to convert Broomhill, Tunbridge Wells, into a technical institute, college, library, museum and memorial hall, at a cost of £8,000.

WHITSTABLE. *Library.* Kent C.C. is considering the purchase of premises as a site for the proposed branch library at Whitstable.

WORTHING. *Development.* Mr. M. R. Fletcher, architect, on behalf of Messrs. Gray Bros. (Worthing), Ltd., is to develop six acres at the Offington Nursery, Offington Lane, Worthing.

SOUTH-WESTERN COUNTIES

SWINTON. *School Alterations.* Swinton and Pendlebury Education Committee is to enlarge the Cromwell Road School, at a cost of £35,612.

TAUNTON. *School.* Somersetshire Education Committee is to erect new premises for the Bishop Fox's Girls' School, Taunton, at a cost of £51,000.

EASTERN COUNTIES

CHATTERIS. *School.* Isle of Ely Education Committee is to erect an elementary school at Chatteris at a cost of £35,579.

CHELMSFORD. *Development.* Messrs. Elliott and Archer are to develop Moulsham Lodge estate, Chelmsford, for Mr. R. H. Currie.

IPSWICH. *Extensions, County Hall.* East Suffolk C.C. has obtained sanction to borrow £33,333 for extensions to the County Hall, Ipswich.

ISLE OF ELY. *School.* Isle of Ely Education Committee is to erect a school and house at Thorney at a cost of £17,000.

ISLE OF ELY. *Houses.* Plans passed by Isle of Ely C.C.: Ten houses, Lynn Road and Littleport Road, Spalding and Myers.

ISLE OF ELY. *School.* Isle of Ely Education Committee is to enlarge the school at Whittlesey Coates, at a cost of £3,200.

LOUGHTON. *School and Housing.* Essex Education Committee is to erect a junior school at Loughton in view of the considerable housing developments which are in hand, or for which schemes have been prepared. The schemes comprise the erection of about 6,000 houses.

OUTWELL. *School.* Isle of Ely Education Committee is to erect a school at Outwell, at a cost of £11,000.

WALTHAM ABBEY. *Branch Library.* Essex C.C. has purchased properties in Highbridge Street, Waltham Abbey, for branch library purposes.

MIDLAND COUNTIES

BIRMINGHAM. *School.* Birmingham Education Committee has obtained sanction to borrow £54,259 for the erection of an elementary school at Wheelers Lane, King's Heath.

LONGTON. *Houses.* Messrs. Adams and Edwards, architects to Messrs. J. E. Simester & Co., are to erect houses in Park Avenue and Chaplin Road, Longton, Staffs.

STOKE-ON-TRENT. *Housing.* Stoke-on-Trent Corporation is to acquire 32 acres at Rose House Farm, Meir, for a housing scheme.

STOKE-ON-TRENT. *Land Development.* Stoke-on-Trent Corporation has approved the proposals of Messrs. W. and P. Adams for the development of land off Furlong Road, Tunstall.

STOKE-ON-TRENT. *Development.* Mr. Cartledge is to develop land on the Trent Vale Farm estate, Trent Vale, Stoke-on-Trent.

WARWICKSHIRE. *Police Houses.* Warwickshire C.C. is to erect police houses at Hockley Heath, Rugby, Bishop's Tachbrook, Stockingford and Furnace End.

WOLVERHAMPTON. *School Enlargement.* Wolverhampton Education Committee has obtained sanction to borrow £30,700 for the enlargement of Springfield Road School.

NORTHERN COUNTIES

BRADFORD. *Houses.* Mr. E. Tidswell is to erect six houses in Great Horton Road and Pemberton Drive, Bradford.

CHORLTON. *School Extensions.* Manchester Education Committee has approved plans for extensions at Chorlton high school for boys.

MANCHESTER. *Housing.* The Manchester Corporation is to clear the Bradford Road area and provide new housing at a cost of £109,825.

SCOTLAND

GLASGOW. *Houses.* Glasgow Corporation has approved proposals for the erection of 279 houses in Maukinfauld Road and London Road.

GLASGOW. *Police Depot, etc.* At Glasgow Corporation the City Engineer submitted a statement showing that the total cost of the architectural works at present authorized for which his department is responsible and for which plans are prepared, or are in course of preparation, is about £1,650,000 as follows, viz.: Police department, £461,000; general department, £78,900; markets department, £13,500; health department, £1,095,500.

THE BUILDINGS ILLUSTRATED

HOUSE AT PERTON, STAFFS (pages 363-365) Architects: Lavender and Twentymen. The general contractors were H. Gough and Son, who were also responsible for the joinery. The principal sub-contractors and suppliers included: British Reinforced Concrete Engineering Co., Ltd., reinforced concrete; Himley Brick Co., plinth bricks; Tarmac, Ltd., artificial stone; Colthurst Symons & Co., tiles; Frazzi Ltd., Paropa roofing; Manley and Regulus, Ltd., central heating and plumbing; W. H. Podmore, Ltd., electric wiring; Ideal Boilers and Radiators, Ltd., standard baths; Twyford, Ltd., sanitary fittings; Jas. Gibbons, Ltd., door furniture, casements, metal work and windows; Bayliss, Jones and Bayliss, metalwork; Stourbridge Glazed Brick Co., and Craven Dunnill, Ltd., tiling.

FLATS, KING'S CROSS (pages 366-369). Architect: John Dower. The general contractors were W. Shurmur and Sons, Ltd., and the principal sub-contractors and suppliers included: STEEL COMPONENTS—Baldwins, Ltd., Fredk. Braby & Co., Ltd., Crittall Manufacturing Co., Ltd., Gorse Galvanizing Co., Ltd., Henry Hope and Sons, Ltd., Lewis Construction Co., Ltd., John Lysaght, Ltd., H. H. Martyn & Co., Ltd., Jos. Sankey and Sons, Ltd., Steel Ceilings, Ltd., and Synmar, Ltd. CONSTRUCTION MATERIAL—Broadbent & Co., Ltd., slag wool products; Casebourne & Co. (1926), Ltd., pioneer blocks and plaster products; Corkboard Research and Information Bureau, cork insulation slabs; Limmer and Trinidad Lake Asphalt Co., Ltd., asphalt screeding; London Brick Company, Fletton bricks and partition blocks; Newalls Insulation Co., Ltd., asbestos bricks; Ruberoid Co., Ltd., roof waterproofing; Turner Bros. Asbestos Co., Ltd., asbestos products; and Venesta, Ltd., plymax and wood doors. FITTINGS AND FINISHES—Armco, Ltd., baths, sinks, and wash-hand basin; British Kitchen Combination Co., kitchen combination unit; Robert Bowran & Co., Ltd., bitumen paints; Casebourne & Co. (1926), Ltd., plastics; Catesbys, Ltd., linoleum, plain brown; Corkboard Research and Information Bureau, cork tiles; Fordham Pressings, Ltd., flushing cisterns; Gas Light and Coke Co., Ltd., heating and lighting equipment; Matthew Hall & Co., Ltd., plumbing services; Kitchen Planning Centre, built-in kitchen fittings; Limmer and Trinidad Lake Asphalt Co., Ltd., coloured asphalt; Linoleum and Floorcloth Manufacturers' Association, linoleum; Nobel Chemical Finishes, Ltd., paints and distempers; Ruberoid, Ltd., roofing tiles; and House Furnishing, Ltd., furniture and furnishing.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for

labourers. The rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I.	II.				I.	II.				I.	II.
A	ABERDARE	S. Wales & M.	1 7	1 2 1/2	A	EASTBOURNE	S. Counties	1 6	1 1 1/2	A	Normanton	Yorkshire	1 7	1 2 1/2
A	Aberdeen	Scotland	1 7	1 2 1/2	A	Ebbw Vale	S. Wales & M.	1 6 1/2	1 2	A	Northampton	Mid. Counties	1 7	1 2 1/2
A	Abergavenny	S. Wales & M.	1 6 1/2	1 2	A	Edinburgh	Scotland	1 7	1 2 1/2	A	North Shields	N.E. Coast	1 7	1 2 1/2
A	Abingdon	S. Counties	1 5 1/2	1 1 1/2	A	Exeter	S.W. Counties	1 7	1 1 1/2	A	North Staffs	Mid. Counties	1 7	1 2 1/2
A	Accrington	N.W. Counties	1 7	1 2 1/2	B	Exmouth	S.W. Counties	1 5	1 0 1/2	A	Norwich	E. Counties	1 6 1/2	1 2 1/2
A	Addlestone	S. Counties	1 6	1 1 1/2						A	Nottingham	Mid. Counties	1 7	1 2 1/2
A	Adlington	N.W. Counties	1 7	1 2 1/2	A	FELIXSTOWE	E. Counties	1 5 1/2	1 1 1/2	A	Nuneaton	Mid. Counties	1 7	1 2 1/2
A	Airdrie	Scotland	1 7	1 2 1/2	A	Filey	Yorkshire	1 5 1/2	1 1 1/2	A	Oldham	Mid. Counties	1 5 1/2	1 1 1/2
C	Aldeburgh	E. Counties	1 3	0 11 1/2	A	Fleetwood	N.W. Counties	1 7	1 2 1/2	A	Oswestry	N.W. Counties	1 5 1/2	1 1 1/2
A	Altrincham	N.W. Counties	1 7	1 2 1/2	B	Folkestone	S. Counties	1 4 1/2	1 0 1/2	A	Oxford	S. Counties	1 6 1/2	1 2
P	Appley	N.W. Counties	1 3 1/2	0 11 1/2	A	Frodsham	N.W. Counties	1 7	1 2					
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2 1/2	A	Frome	S.W. Counties	1 4	1 0					
B	Aylesbury	S. Counties	1 5	1 0 1/2										
B	BANBURY	S. Counties	1 5	1 0 1/2	A	GATESHEAD	N.E. Coast	1 7	1 2 1/2	A	PAISLEY	Scotland	1 7	1 2
B	Bangor	N.W. Counties	1 4 1/2	1 0 1/2	B	Gillingham	S. Counties	1 5	1 0 1/2	B	Pembroke	S. Wales & M.	1 3 1/2	0 11 1/2
A	Barnard Castle	N.E. Coast	1 5 1/2	1 1 1/2	A	Glamorgan-shire, Rhondda Valley District	S. Wales & M.	1 6 1/2	1 2	B	Perth	Scotland	1 7	1 2 1/2
A	Barnsley	Yorkshire	1 7	1 2 1/2	A	Glasgow	Scotland	1 7	1 2 1/2	A	Peterborough	E. Counties	1 6 1/2	1 2
B	Barnstaple	S.W. Counties	1 5	1 0 1/2	A	Gloucester	S.W. Counties	1 6	1 1 1/2	A	Plymouth	S.W. Counties	1 7	1 2 1/2
A	Barrow	N.W. Counties	1 7	1 2 1/2	A	Goole	Yorkshire	1 6	1 1 1/2	A	Portsmouth	Yorkshire	1 7	1 2 1/2
A	Barnley	S. Wales & M.	1 7	1 2 1/2	A	Gosport	S. Counties	1 6	1 1 1/2	A	Portsmouth	S. Wales & M.	1 6 1/2	1 2 1/2
B	Basingstoke	S.W. Counties	1 5	1 0 1/2	A	Grantham	Mid. Counties	1 5 1/2	1 1	A	Preston	N.W. Counties	1 7	1 2 1/2
A	Bath	S.W. Counties	1 6	1 1 1/2	A	Gravesend	S. Counties	1 6 1/2	1 2					
A	Batley	Yorkshire	1 7	1 2 1/2	A	Greenock	Scotland	1 7	1 2					
A	Bedford	E. Counties	1 6	1 1 1/2	A	Grimby	Mid. Counties	1 5	1 0	A	QUEENSBURY	N.W. Counties	1 7	1 2 1/2
A	Berwick-on-Tweed	N.E. Coast	1 6	1 1 1/2	B	Guildford	S. Counties	1 5	1 0					
A	Bewdley	Mid. Counties	1 6	1 1 1/2						A	READING	S. Counties	1 6 1/2	1 2
B	Bicester	S. Counties	1 5	1 0 1/2	A	HALIFAX	Yorkshire	1 7	1 2 1/2	B	Reigate	S. Counties	1 5 1/2	1 1 1/2
A	Birkenhead	N.W. Counties	1 6 1/2	1 2	A	Hanley	Mid. Counties	1 7	1 2 1/2	A	Retford	Mid. Counties	1 5 1/2	1 1 1/2
A	Birmingham	Mid. Counties	1 7	1 2 1/2	A	Harrogate	Yorkshire	1 7	1 2 1/2	A	Rhonda Valley	S. Wales & M.	1 6 1/2	1 2
A	Bishop Auckland	N.E. Coast	1 6 1/2	1 2	A	Hartlepool	N.E. Coast	1 7	1 2 1/2	A	Ripon	Yorkshire	1 5 1/2	1 1 1/2
A	Blackburn	N.W. Counties	1 7	1 2 1/2	A	Harwich	E. Counties	1 5	1 0 1/2	A	Rochdale	N.W. Counties	1 7	1 2 1/2
A	Blackpool	N.W. Counties	1 7	1 2 1/2	B	Hastings	S. Counties	1 6	1 1 1/2	A	Rochester	S. Counties	1 5	1 0 1/2
A	Blyth	N.E. Coast	1 7	1 2 1/2	A	Hatfield	S. Counties	1 6	1 1 1/2	A	Ruabon	N.W. Counties	1 6 1/2	1 2
B	Bognor	S. Counties	1 5	1 0 1/2	B	Hereford	S.W. Counties	1 5	1 0 1/2	A	Rugby	Mid. Counties	1 6 1/2	1 2 1/2
A	Bolton	N.W. Counties	1 7	1 2 1/2	A	Hertford	E. Counties	1 6	1 1 1/2	A	Runcorn	N.W. Counties	1 7	1 2 1/2
A	Boston	Mid. Counties	1 5 1/2	1 1 1/2	A	Heysham	N.W. Counties	1 7	1 2 1/2					
A	Bournemouth	S. Counties	1 6	1 1 1/2	A	Howden	N.E. Coast	1 7	1 2 1/2	A	ST. ALBANS	E. Counties	1 6 1/2	1 2
B	Bovey Tracey	S.W. Counties	1 4	1 0	A	Huddersfield	Yorkshire	1 7	1 2 1/2	A	St. Helens	N.W. Counties	1 7	1 2 1/2
A	Bradford	Yorkshire	1 7	1 2 1/2	A	Hull	Yorkshire	1 7	1 2 1/2	A	Salisbury	S.W. Counties	1 3 1/2	0 11 1/2
A	Brentwood	E. Counties	1 6 1/2	1 2						A	Scarborough	Yorkshire	1 6 1/2	1 2
A	Bridgend	S. Wales & M.	1 7	1 2 1/2	A	ILKLEY	Yorkshire	1 7	1 2 1/2	A	Seaford	Mid. Counties	1 7	1 2 1/2
B	Bridgewater	S.W. Counties	1 5	1 0 1/2	A	Immingham	Mid. Counties	1 7	1 2 1/2	A	Sheffield	Yorkshire	1 7	1 2 1/2
A	Bridlington	Yorkshire	1 6 1/2	1 2	A	Ipswich	E. Counties	1 6	1 1 1/2	A	Shipley	Yorkshire	1 7	1 2 1/2
A	Brighouse	Yorkshire	1 7	1 2 1/2	B	Isle of Wight	S. Counties	1 4	1 0	A	Shrewsbury	Mid. Counties	1 6	1 1 1/2
A	Brighton	S. Counties	1 6	1 1 1/2	A	JARROW	N.E. Coast	1 7	1 2 1/2	A	Skipton	Yorkshire	1 6	1 1 1/2
A	Bristol	S.W. Counties	1 7	1 2 1/2						A	Slough	S. Counties	1 6	1 1 1/2
B	Brixham	S.W. Counties	1 5	1 0 1/2	A	KEIGHLEY	Yorkshire	1 7	1 2 1/2	A	Solihull	Mid. Counties	1 6 1/2	1 2
A	Bromsgrove	Mid. Counties	1 7	1 2 1/2	A	Kendal	N.W. Counties	1 5 1/2	1 1 1/2	A	Southampton	S. Counties	1 6 1/2	1 2 1/2
B	Bromyard	Mid. Counties	1 5	1 0 1/2	A	Keswick	N.W. Counties	1 5 1/2	1 1 1/2	A	Southend-on-Sea	E. Counties	1 7	1 2 1/2
A	Burnley	N.W. Counties	1 7	1 2 1/2	A	Kettering	Mid. Counties	1 6	1 1 1/2	A	Southport	N.W. Counties	1 7	1 2 1/2
A	Burslem	Mid. Counties	1 7	1 2 1/2	A	Kidderminster	Mid. Counties	1 6	1 1 1/2	A	S. Shields	N.E. Coast	1 7	1 2 1/2
A	Burton-on-Trent	Mid. Counties	1 7	1 2 1/2	A	King's Lynn	E. Counties	1 4 1/2	1 0 1/2	A	Stafford	Mid. Counties	1 6 1/2	1 2
A	Bury	N.W. Counties	1 7	1 2 1/2						A	Stirling	Scotland	1 7	1 2 1/2
A	Buxton	N.W. Counties	1 6 1/2	1 2	A	LANCASTER	N.W. Counties	1 7	1 2 1/2	A	Stockport	N.W. Counties	1 7	1 2 1/2
					A	Leamington	Mid. Counties	1 6 1/2	1 2	A	Stockton-on-Tees	N.E. Coast	1 7	1 2 1/2
A	CAMBRIDGE	E. Counties	1 6 1/2	1 2	A	Leeds	Yorkshire	1 7	1 2 1/2	B	Stoke-on-Trent	Mid. Counties	1 7	1 2 1/2
B	Canterbury	S. Counties	1 4 1/2	1 0 1/2	A	Leek	Mid. Counties	1 7	1 2 1/2	B	Stroud	S.W. Counties	1 5	1 0 1/2
A	Cardiff	S. Wales & M.	1 7	1 2 1/2	A	Leicester	Mid. Counties	1 7	1 2 1/2	A	Sunderland	N.E. Coast	1 7	1 2 1/2
A	Carlisle	N.W. Counties	1 7	1 2 1/2	A	Leigh	N.W. Counties	1 7	1 2 1/2	A	Swansea	S. Wales & M.	1 7	1 2 1/2
B	Carmarthen	S. Wales & M.	1 5	1 0 1/2	A	Levens	S. Counties	1 5	1 0 1/2	A	Swindon	S.W. Counties	1 5 1/2	1 1 1/2
B	Carnarvon	N.W. Counties	1 5	1 0 1/2	A	Lichfield	Mid. Counties	1 6	1 1 1/2					
A	Carnforth	N.W. Counties	1 7	1 2 1/2	A	Lincoln	Mid. Counties	1 7	1 2 1/2	A	TAMWORTH	N.W. Counties	1 6 1/2	1 2
A	Castelford	Yorkshire	1 7	1 2 1/2	A	Liverpool	N.W. Counties	1 8 1/2	1 3 1/2	B	Taunton	S.W. Counties	1 5	1 0 1/2
A	Chatham	S. Counties	1 5 1/2	1 1 1/2	A	Llandudno	N.W. Counties	1 6	1 1 1/2	A	Teesside Dist.	N.E. Counties	1 7	1 2 1/2
A	Chelmsford	E. Counties	1 5 1/2	1 1 1/2	A	Llanelli	S. Wales & M.	1 7	1 2 1/2	A	Teignmouth	S.W. Coast	1 6	1 1 1/2
A	Cheltenham	S.W. Counties	1 5 1/2	1 1 1/2	A	London (12-miles radius)		1 8 1/2	1 3 1/2	A	Todmorden	Yorkshire	1 7	1 2 1/2
A	Chester	N.W. Counties	1 7	1 2 1/2	A	Long Eaton	Mid. Counties	1 7	1 2 1/2	A	Torquay	S.W. Counties	1 6 1/2	1 2
A	Chesterfield	Mid. Counties	1 7	1 2 1/2	A	Loughborough	Mid. Counties	1 7	1 2 1/2	B	Truro	S.W. Counties	1 4	1 0
B	Chichester	S. Counties	1 5	1 0 1/2	A	Luton	E. Counties	1 6 1/2	1 2	A	Tunbridge Wells	S. Counties	1 5 1/2	1 1 1/2
A	Chorley	N.W. Counties	1 7	1 2 1/2	A	Lytham	N.W. Counties	1 7	1 2 1/2					
B	Cirencester	S. Counties	1 4 1/2	1 0 1/2						A	Tyne District	N.E. Coast	1 7	1 2 1/2
A	Citthoree	N.W. Counties	1 7	1 2 1/2	A	MACCLESFIELD	N.W. Counties	1 6 1/2	1 2	A	WAKEFIELD	Yorkshire	1 7	1 2 1/2
A	Clydebank	Scotland	1 7	1 2 1/2	A	Maidstone	S. Counties	1 5 1/2	1 1 1/2	A	Walsall	Mid. Counties	1 7	1 2 1/2
A	Coalville	Mid. Counties	1 7	1 2 1/2	A	Manchester	N.W. Counties	1 7	1 2 1/2	A	Warrington	N.W. Counties	1 6 1/2	1 2
A	Colchester	E. Counties	1 6	1 1 1/2	A	Mansfield	Mid. Counties	1 7	1 2 1/2	A	Warwick	Mid. Counties	1 6 1/2	1 2
A	Colne	N.W. Counties	1 6 1/2	1 2	B	Margate	S. Counties	1 4 1/2	1 0 1/2	A	West Bromwich	Mid. Counties	1 7	1 2 1/2
A	Colwyn Bay	N.W. Counties	1 6	1 1 1/2	A	Matlock	S. Counties	1 5 1/2	1 1 1/2	A	Weston-s-Mare	S.W. Counties	1 6	1 1 1/2
A	Consett	N.E. Coast	1 6 1/2	1 2	A	Merthyr	S. Wales & M.	1 6 1/2	1 2	A	Whitby	Yorkshire	1 6	1 1 1/2
A	Conway	N.W. Counties	1 6	1 1 1/2	A	Middlesbrough	N.E. Coast	1 7	1 2 1/2	A	Widnes	N.W. Counties	1 7	1 2 1/2
A	Coventry	Mid. Counties	1 7	1 2 1/2	A	Middlewich	N.W. Counties	1 6	1 1 1/2	A	Wigan	N.W. Counties	1 7	1 2 1/2
A	Crewe	N.W. Counties	1 6	1 1 1/2	B	Minhead	S.W. Counties	1 4	1 0	A	Winchester	S. Counties	1 6 1/2	1 2 1/2
A	Cumberland	N.W. Counties	1 5 1/2	1 1 1/2	B	Monmouth	S. Wales & M.	1 4	1 0	A	Windsor	S. Counties	1 6	1 1 1/2
					A	Morecambe	N.W. Counties	1 7	1 2 1/2	A	Wolverhampton	Mid. Counties	1 7	1 2 1/2
A	DARLINGTON	N.E. Coast	1 7	1 2 1/2						A	Worcester	Mid. Counties	1 6 1/2	1 2
A	Darwen	N.W. Counties	1 7	1 2 1/2	A	NANTWICH	N.W. Counties	1 6	1 1 1/2	A	Workop	Yorkshire	1 5 1/2	1 1 1/2
B	Deal	S. Counties	1 4 1/2	1 0 1/2	A	Neath	S. Wales & M.	1 7	1 2 1/2	B	Wykeham	N.W. Counties	1 6 1/2	1 2
A	Deunigh	N.W. Counties	1 5 1/2	1 1 1/2	A	Nelson	N.W. Counties	1 7	1 2 1/2	A	Wycombe	S. Counties	1 5 1/2	1 1 1/2
A	Derby	Mid. Counties	1 7	1 2 1/2	A	Newcastle	N.E. Coast	1 7	1 2 1/2					
A	Dewsbury	Yorkshire	1 7	1 2 1/2	A	Newport	S. Wales & M.	1 7	1 2 1/2					
B	Didcot	S. Counties	1 5	1 0 1/2										
A	Doncaster	Yorkshire	1 7	1 2 1/2										
B	Dorchester	S.W. Counties	1 4 1/2	1 0 1/2										
A	Driffield	Yorkshire	1 5 1/2	1 1 1/2										
A	Droitwich	Mid. Counties	1 6	1 1 1/2										
A	Dudley	Mid. Counties	1 7	1 2 1/2										
A	Dumfries	Scotland	1 6	1 1 1/2										
A	Dunfermline	Scotland	1 7	1 2 1/2										
A	Durham	N.E. Coast	1 7	1 2 1/2										

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request. The rates of wages have been revised consequent upon the increase in wages which came into operation on February 1, together with all revisions following authorized annual readjustments.

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The
alities
riting.

II.	
s	d
1	$2\frac{1}{4}$
1	$2\frac{1}{4}$
1	$2\frac{1}{4}$
1	$2\frac{1}{4}$
1	2
1	$2\frac{1}{4}$
1	$2\frac{1}{4}$

1	1 $\frac{1}{2}$
1	2 $\frac{1}{2}$
1	1 $\frac{1}{2}$
1	2

$$\begin{array}{cc} 1 & 2 \\ 0 & 11\frac{3}{4} \\ 1 & 2\frac{1}{4} \\ 1 & 2 \end{array}$$

1	$2\frac{1}{4}$
1	2
1	$1\frac{1}{2}$
1	$2\frac{1}{4}$

1	2
1	1

1	2
1	$1\frac{1}{4}$
1	$2\frac{1}{4}$
1	$0\frac{3}{4}$
1	2

1	1 1/2
1	2 1/2
1	2

0	11 $\frac{1}{2}$
1	2
1	2 $\frac{1}{4}$
1	2 $\frac{1}{4}$
1	2 $\frac{1}{4}$

1	1½
1	1½
1	2
1	1½
1	2

1	2
1	2
1	2
1	2
1	2

1	2½
1	0½
1	2½
1	2½

1	2
1	$0\frac{3}{4}$
1	$2\frac{1}{2}$

1	$2\frac{1}{2}$
1	2
1	0
1	$1\frac{1}{2}$

1	2 $\frac{1}{2}$
1	2 $\frac{1}{2}$
1	2 $\frac{1}{2}$

1	2
1	2
1	$2\frac{1}{4}$
1	$1\frac{1}{2}$
1	$1\frac{1}{2}$

INTER			£	s.	d.
White lead in 1-cwt. casks	.	cwt.	2	17	9
Used oil	.	gall.		3	2
Boiled oil	.	"		3	5
Reserpentine	.	"		3	9
Reserpentine knotting	.	"		14	0
Temper, washable	.	cwt.	2	6	0
Ordinary	.	"	2	0	0
Whitening	.	"		4	0
Ve. double	.	"		4	0
Al. varnish	.	firkin		3	0
Oil varnish	.	gall.		13	0
Inside varnish	.	"		14	0
White enamel	.	"		16	0
White enamel	.	"	1	5	0
Ready mixed paint	.	"		13	6
Black swinick black	.	"		7	6

† Ordinary glazing quality. ‡ Selected glazing quality.

