

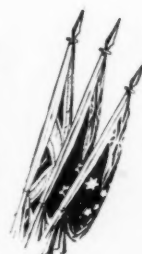
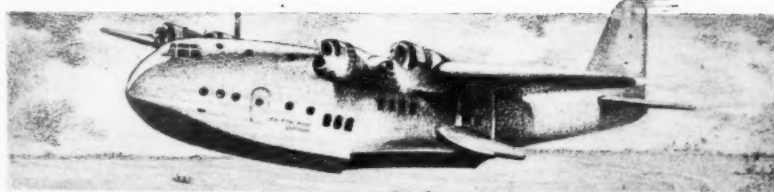


THERE exists a form of "bondage" which, paradoxically enough, ensures freedom to those it holds.

The ties that bind the widely-varying nations of the British Commonwealth to the Mother Country may be said to be completely self-imposed, else why should the men of Australia, Canada, New Zealand, South Africa, India and countless remote corners of the World leap instantly to the call of Britain in her struggle for freedom.

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THE ARCHITECTS'



JOURNAL

THE ARCHITECTS' JOURNAL
WITH WHICH IS INCORPORATED THE BUILDERS'
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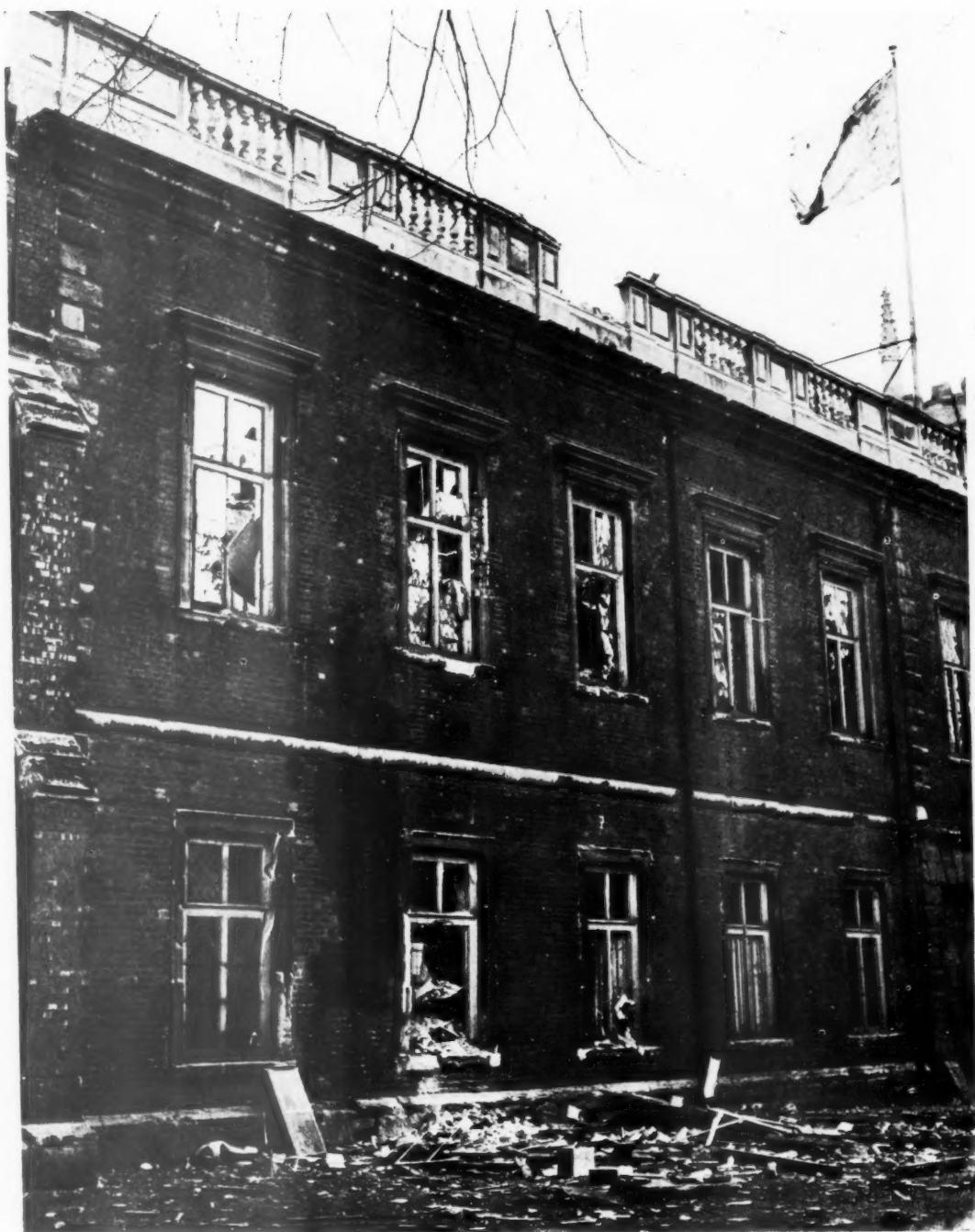
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The Editor will be glad to receive MS. articles
and also illustrations of current architecture in this
country and abroad with a view to publication.
Though every care will be taken, the Editor cannot
hold himself responsible for material sent him.

Owing to the paper shortage the JOURNAL, in common with all
other papers, is now only supplied to newsagents on a "firm
order" basis. This means that newsagents are now unable to
supply the JOURNAL except to a client's definite order.

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place a definite order with your newsagent or send a subscription
order to the Publishers.



AIR RAID DAMAGE AT ETON

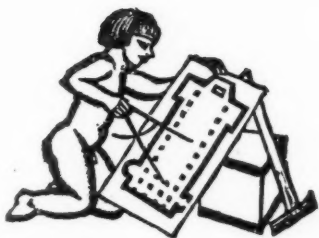
Buildings of Eton College were damaged by incendiary and high-explosive bombs during a raid earlier this year. The destruction was fortunately neither serious nor extensive. The photograph shows a portion of an early 18th-century wing which was damaged by fire.



MESSRS. HEAL'S PREMISES

On Tuesday, April 29, the hearing was begun before Mr. Justice Uthwatt, in the Chancery Division, of the action brought by Mr. J. A. Meikle, of the firm of Messrs. Smith and Brewer, against Mr. Edward Maufe and Messrs. Heal and Son for breach of copyright in regard to Messrs. Heal's premises in Tottenham Court Road. The first three days of the hearing are reported on pp. 306 and 310 of this issue.

The photographs show, top, the existing façade to Tottenham Court Road of Messrs. Heal's premises; centre, the façade of the original building, designed by Messrs. Smith and Brewer in 1917, which was extended to Mr. Maufe's designs in 1937; bottom, the return front to Alfred Mews, looking towards Tottenham Court Road.



ARCHITECTS AND SMALL HOUSES: 3

THE three articles of which this is the last are concerned with how architects can raise the standard of design of all small houses.

In the first two articles the JOURNAL put forward three contentions which can be summarized thus: In 1919 most architects (and this JOURNAL) regarded the housing programme then begun from the standpoint of small house building in 1914; and this attitude proved grievously mistaken. It is therefore important that architects should cease, now, to think of small house building after this war in terms of such building in 1939: for it is already almost certain that post-war house building will be new in organization, scale, construction and methods of production. The design—in the word's widest sense—of post-war houses will probably be determined by two central organizations and their agents and advisers: by a Central Planning Authority as regards distribution and layout, and by the Ministry of Building as regards the design, equipment and methods of production of individual building units.

These developments are no more than probable. Opposition to them will be rarely expressed while the war lasts, while public opinion reflects a general and real determination to build a better Britain afterwards. But it would be foolish not to realize that there will be great opposition, interested and ignorant, directly peace comes, if only on "Have we beaten Hitler to win Hitlerism?" lines. Yet, despite this opposition, it is still probable that these two controls will be set up. After the war the pace and quality of the change back from war to peace will be almost wholly dependent on building; and the building programme will be so staggeringly great that only most strict and most skilful control of all building will prevent chaos. In short, whether we like it or not, we will probably have to have these central controls of both sides of building—of both sides of the design of small houses.

How will these two controls affect the influence of architects on the design of small houses? The answer seems clear. Control of the kind contemplated can only be exercised through expert advisers and executants, and the quality of its results are wholly dependent on the ability of those experts—who will indeed be the real "designers" of post-war small houses. From this it follows that the influence of architects on post-war small houses will be directly dependent on how many men the profession can produce before the end of the war who are obviously

supremely competent to tackle, on the one hand, the manifold problems of positive territorial planning and, on the other, the complex problems of post-war house production. All architects should notice the operative words in this last sentence: "*obviously supremely competent.*" The profession, in the JOURNAL's view, could make no greater mistake than to think that architects in general, just because they are architects, possess the abilities which will be needed to direct national effort in these two fields. The profession can maintain with truth that architects possess, in general, a greater aptitude for developing those special abilities than is possessed by any other body of men. But whether aptitude becomes obvious ability will depend entirely upon the profession's power to put aside complacency during the next two years and replace it with vigorous self-education.

If the profession is to exert after this war the influence it should exert over every aspect of the design of small houses, it should have ready when peace comes two separate bodies of storm troops: the first composed of territorial planners, the second of men who possess special knowledge of large-scale repetitive building. The war has scattered many of the best recruits for the first corps, but they should be listed and encouraged, so far as is possible, to prepare themselves for their post-war opportunity. All over Britain potential recruits for the second body are now gaining most valuable experience on the sites of ordnance factories, camps and war housing. The knowledge of such men, properly used, would enable the profession when peace comes to speak with obvious competence on what can and cannot be done in the large-scale production of small houses.

As a first step towards creating these two corps of post-war storm troops—as a first step towards architects designing post-war small houses—none would be better than for every architect to keep on his office wall a pronouncement to this effect:

It is absolutely useless for the profession to proclaim grandly that it has the right to take part in practically every aspect of physical reconstruction, and then to sit back complacently waiting for fat commissions to be delivered to its door.

Architects can hope to influence reconstruction only by first discovering for themselves what the biggest problems of reconstruction will be; and by thereafter attaining complete knowledge of all aspects of those problems. Men who are obvious masters of all aspects of a problem are never overlooked when the time comes for its solution.



The Architects' Journal

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NOTES & TOPICS

WARTIME ROYAL ACADEMY*

IN the courtyard of Burlington House the only sure sign of war was that Sir Joshua Reynolds was still absent from his pedestal, for some crumbs of glass that glittered in May sunshine may or may not have been traces of the Luftwaffe.

A cigarette which had just been lit provided a good wartime reason for a walk round the courtyard and for reflection in advance, on what one expected from the R.A. Summer Exhibition, 1941. Could it be held, one wondered, that in holding a Summer Exhibition at all this year the Academy achieved a great deal?

There was something to be said for this point of view. The R.A. Exhibition is a social occasion; it ranks with the Boat Race and Derby day as a big event in a peacetime year, and its opening just as usual this year may comfort a very large number of people who have never been inside it. But this, one was bound to notice, was a social and not a cultural significance. If the R.A. Exhibition was to prove that despite the war Britain was still really interested in and was still creating works of art, the works shown must to a reasonable degree reflect the profound changes which the war has brought about.

As regards architecture, it seemed particularly necessary to think of what one meant by "to a reasonable degree." War stimulates painters and greatly increases their number. It is quite otherwise with architects. Very few architects can continue to practise architecture in wartime, and of those who do nearly all are designing buildings which cannot be illustrated even on the walls of the Academy. It was therefore to be expected that the Architecture Room would show few signs of the radical change of outlook and technique which the war has imposed on all who build. But one could hope that some hint of this change would be shown—if only in a few anonymous school camps and wartime housing schemes.

* Some of the architectural works exhibited at this year's Royal Academy will be illustrated in the next issue of the JOURNAL.

In the event, the works shown in the Architecture Room convey no such hint. Architects have been so scattered by the war that perhaps a "pre-war" architectural section in the Academy was inevitable. Whatever the reason, this year's architectural display is wholly "pre-war"; and it may be only our new perceptions that make a thin display so fantastic and oppressive.

Facing the door, in red line and yellow wash, are some drawings of Liverpool Catholic Cathedral by Sir Edwin Lutyens. There is a tendency to linger there—for that type of building is one which, on very special occasions, may continue after the war. After a few minutes a dozen other buildings can be picked out, here and there, as representing an attitude towards design which may leap the great divide of war. Great Ormond Street Hospital by Stanley Hall and Easton and Robertson, a detail of a school by Mr. Julian Leathart, a police station by Mr. G. Mackenzie Trench, a rather "tremendous" Sheffield Infirmary by Adams, Holden and Pearson, and a pleasant ink and blue-wash drawing of an oil refinery by S. Colwyn Foulkes.

But it is impossible, in May, 1941, any longer to regard most of the remaining designs as designs for *real* buildings. Presented in Chinese white and depositing washes, with their thatch and pantiles, Swedish, Cotswold or neo-Regency trimmings or portentous masses of Portland stone, they seem only specimens of a very remote architectural confusion. Whatever happens after this war, one was forced to realize architecture can never go back to the pot-pourris of the 'thirties.

Among the cut-out designs for stained glass windows which usually form an edging to the Architecture Room there are two innovations. The first is the incorporation of a recognizable Westland Lysander aeroplane in a design in stained glass and lead; and the second is the inclusion of two large cartoons for Guinevere and Elaine by "The late William Morris."

MEIKLE AND OTHERS v. MAUFE AND OTHERS

It is difficult to decide in exactly what qualities lies the impressiveness of Street's courtrooms at the Law Courts. In part it is due to factors which have nothing to do with architecture—to consciousness of the gravity of the matters decided in them. In part, doubtless, it is associative: the small clerestory windows, high panelling and subdued light and rustle of books and papers are all ecclesiastical in their associations. But there is more in it than these. The detail of Mr. Justice Uthwatt's Chancery court is impressive on its own account by its strong-mindedness.

Strong benches with strong mouldings are surrounded by high coffee-coloured oak panelling. The coffee-coloured ceiling panelling and the four big beaten-iron candelabra are equally vigorous. "Facts are facts," every detail seems to announce in a strong-jawed way. "Dust is a fact—don't show it. Draught, is also a fact—deal with it." And the two splayed green curtains, hanging from brass rods, which protect the judge from draughts, seem to emphasize that only the most practical ways of dealing with practical facts would receive sympathy from that *décor*.

During the period I was present the Court was being asked to compare photographs of the internal details of old and new sections of Messrs. Heal's building, and discussions were proceeding whether arrows drawn on the photographs to indicate the exact dividing line between new and old were or were not in the right position.

*

Any architect who attends a legal case turning on questions of architectural design must, I think, retain as a predominant impression that of the labour and skill needed to present relevant facts with proper emphasis. A company's accounts consist, I presume, of figures which are either right or wrong: the degree of rightness or wrongness is no doubt susceptible of lengthy debate, but at least the figures are there to start with, and no one can call a 7 an 8. But even this primary simplicity is not present in discussions of architectural design, and therefore such a case seems to constitute a greater test of advocacy and of judicial skill than does the most momentous and complex financial action.

1940 COUNCIL EXHIBITION

The 1940 Council held a private view of its planning exhibition "Living in Cities" at the R.I.B.A. last week.

*

The aim of the exhibition is to persuade as many people as possible that planned reconstruction and redevelopment after the war is both desirable and possible. For this reason the exhibition is small, eminently portable, and, since most of the exhibits are photographs and prints, the exhibition could be shown in several towns simultaneously.

*

The few points which the 1940 Council have chosen to put before the public are familiar to architects: so familiar that we may forget how unknown they are to nearly everyone else. In this exhibition they are emphasised by some excellent, really excellent, photographs and by very well-chosen coloured prints and plans.

HYDRAULICS IN THE HOME

One of the most sharply clear memories of my early youth is of washing my hands in a deeply undercut, round, blue-flowered lavatory basin with a piece of brown Windsor soap and of the grasp of a large, hard hand on the back of my neck.

"I have told you before, young man," said a Naval voice, bringing my somewhat protuberant eyes within an inch of a wasp-waisted Victorian tap, "not to wash under running water here. It has to be pumped."

*

The incident mystified me at the time, for I was at an age when washing by any method was expected to earn from elders commendation rather than violence: yet it has come to mind many times in the past two months: come to mind rhythmically, I might say. In the course of war-time travel I have stayed in a house where all water has to be pumped by hand.

*

The niceties of calculation this situation induces, the alertness which spreads from it into all human relationships, cannot be imagined by those who can leave a tap running with all the heedlessness with which they helped themselves to pre-war marmalade. A hand pump (semi-

rotary, 2-3 g.p.m.) imposes Labour Service on all, it imposes a community of interest on the household so close and binding that it is astounding to me that the exponents of either extreme political creed have not installed one in every house and flat block over which they hold sway.

*

In a cubicle in a dark corner of a weather-boarded lean-to is the pump, a knot-hole giving a glimpse of the compost heap, several thousand worm-holes and the word "BER . . ." cut with a knife. Who was Ber? (tick-tock, tick tock). The tank holds 100 gallons, the system about 40, the pump does 2—say $2\frac{1}{2}$ —g.p.m. (tick-tock, tick tock). How long have I been here? Lucy is wasteful with water. I *know* she is. Possibly BER-tie? (tick tock). I can't think how George can be such an ass as to count up to 2,000: I should go raving mad (tick tock). Hush—washing up again—another 4 gallons at least (tick-tock). I can well understand how people go queer doing repetitive work . . . (tick-tock, tick-tock, tick-tock).

*

And sometimes, in the night, one remembers that the ball-valve of the ground floor w.c. is apt to stick. Supposing it stuck after the last person tonight? About half a gallon a minute. 140 times a half times a . . . Is it worth getting up?

HINT ON PUBLIC RELATIONS

The Exhibition had been well arranged. All the drawings well lighted and well grouped. The platform was ready and the buffet would be tomorrow. In the meantime the Press had come to view.

*

The Head of the School was up-to-date: essential facts and names were ready on typescript slips, and the adventurous were being led round the designs for a New World, helped with the spelling of jargon and having one or two pleasing cross-headings ("Edward VII. Bridge to Go") trailed in front of them.

*

But one youngish well-dressed man sat quite still. He even sat quite still when the rest snapped notebooks and moved over to the sherry. Then he came near the Head.

"I represent *News Press*," he said, producing a card to prove it. "That stuff's no use to my agency."

"I'm sorry," said the Head. "What can I tell you, do you think?"

*

"This," rejoined *News Press*. "Are any of these drawings the work of a blind boy? Have you had any trouble with the girls in the school? Are those clinics all going to be birth-control clinics by any chance? Is this boy Wawker any relation to the Lord Wawker who shot himself last year?"

The Head said he thought not.

*

"Then," said *News Press*, "this show is no good to me." He took his hat. "But, see here," he went on as an afterthought, "this thing doesn't open till tomorrow, does it? Well, if you want any boosting by far the best thing that could happen before then would be—a fire. That would be worth a 'phone call any day in this place, I assure you."

ASTRAGAL

NEWS

CONSULTATIVE PANEL ON PHYSICAL REPLANNING

Professor Eva G. R. Taylor, D.Sc., F.R.G.S., F.R.Hist.Soc., has accepted Lord Reith's invitation to join the Consultative Panel on Physical Replanning. Miss Taylor is Professor of Geography of London University at Birkbeck College. The Consultative Panel met on April 23 under the chairmanship of Lord Reith and divided into groups for work on the special problems upon which Lord Reith requires information and advice.

SCALE OF FEES FOR REFUGE ACCOMMODATION

A scale of fees has been agreed with the Ministry of Works and Buildings for architects' services in connection with the provision of refuges in Government buildings to be carried out under the direction of the Ministry. Copies of the scale can be obtained on application to the Secretary, R.I.B.A., by members engaged on this work.

STUDENTS' CONGRESS AT CAMBRIDGE

Following the decision of the Council of the Northern Architectural Students' Association and representatives of the Southern and Scottish architectural schools, the 1941 N.A.S.A. Congress was held in Cambridge as a part of the Congress of the National Union of Students.

The first business of the Congress was to consider the possibility, suggested at the December, 1940, meeting of N.A.S.A., of forming an architectural student organization including the Southern and Scottish schools. The motion "that this meeting approves the formation of an association of the architectural schools of Great Britain, to be known as the 'Architectural Students' Association,' the character and constitution of which to be determined by a working committee of delegates to this Congress," proposed by F. S. Bolland (Manchester), was carried unanimously. A working committee was set up immediately and drafted a provisional form of constitution. The result of the meetings of this committee was that the ARCH.S.A. shall have three subsections, the Southern, Northern, and Scottish; that each subsection shall hold monthly meetings concurrently; that there shall be an annual Congress of the ARCH.S.A. commencing at Manchester in November next; that there shall be a fortnightly Journal of the Association called *Plan*, to be published by Liverpool S.A., to facilitate open discussion of problems of wide architectural interest.

During the congress, which lasted five days, the following discussions took place:

'Science and Architectural Education,' opened by William Allen, chairman, F. S. Bolland, President of the N.A.S.A.

'Further Aspects of Architectural Education,' opened by P. Holbourne.

'The Architect in relation to Society,' opened by P. Dessau.

CONCRETE HOUSING IN MANCHESTER

A pair of experimental houses has been erected on the Wythenshawe Estate by the Manchester Corporation Housing Department Works Section under the direction of the Director of Housing (Mr. John Hughes, B.Arch., F.R.I.B.A.). Floors, roofs and stairs are of concrete. The roofs are pitched, and have precast roof beams covered with a light-weight precast slab from beam to beam, and finally finished with roof tiles. The stairs are of precast units made in the Corporation's own works with a special granite aggregate to give a terrazzo finish. Floors also are of precast units, the precast ceiling joist to the bedrooms together with fibrous plaster ceiling being wired through

to the concrete units. The concrete gutters are in *in situ* concrete, rainwater down-spouts are in asbestos cement. A specially strengthened compartment adjacent to the kitchen can be used as an indoor air raid shelter.

WAR-TIME FACTORY CONSTRUCTION

On November 14 the JOURNAL published Bulletin C12, being recommendations for the design of single-storey factories in war-time issued by the Research and Experiments Department of the Ministry of Home Security. In section 5 (b) of this Bulletin the following paragraph appeared:

"Insulating board lining under sheeted roofs should in no account be used. Under a direct hit such a lining does not save the roof sheeting and causes extensive damage to the roof steelwork. Unlined roof sheeting fixed in the usual way is capable of being blown off without damage to the steelwork. The presence of the lining, however, results in an excessive uplift being applied to the steelwork and may cause very extensive damage to it."

The Ministry has now issued the addendum to this statement which is printed below:

"This objection to the use of insulating board linings under sheeted roofs only applies, of course, where the lining is fixed below the purlins, either direct to the underside of timber purlins or to timber studding bolted to steel purlins.

"There is no objection to the use of insulating board lining fixed above the purlins provided that the sheeting and lining are not more securely fixed to the purlins than would be the case in an unlined roof. Moreover, in the case of roofs covered with asbestos-cement sheeting, such a lining will probably reduce the area of sheeting damaged by a near miss."

A CORRECTION

The JOURNAL regrets that in its illustration of Coventry's wartime housing scheme in its issue for April 24 it stated incorrectly the names of the assistants who were responsible for this scheme under the direction of Mr. D. E. E. Gibson, City Architect. The responsible assistants were Messrs. G. H. Morris, L. Whitaker and L. A. Clarke.

OBITUARY

PILOT-OFFICER H. R. LANCHESTER

The JOURNAL greatly regrets to announce that Pilot-Officer H. R. Lanchester, A.R.I.B.A., a partner in the firm of Messrs. Lanchester, Lodge and Davis, has been killed on Active Service. The following appreciation has been received from Mr. T. A. Lodge.

THE whole architectural profession and all those with whom he came into contact will learn with the most profound grief of the loss of Pilot-Officer H. Robert Lanchester. By the great sacrifice he has made we lose not only a brilliant architect and a gallant airman, but also a very dear friend, whose charm and personality will be for ever remembered.

It has been the privilege of but a few to meet him and to know him as I have done during the last twenty years, both in the office and in the outside world, and my admiration of his character and capabilities was ever increasing.

After leaving Sidcup School, Somerset, he at once took up the study of architecture, and later went to University College under Professor Richardson. For a short time he was in the offices both of Professor Adshead and Sir John Burnet, Tait and Lorne, before entering our own office, in which he became a partner some three years ago.

In his professional career, so deplorably shortened, he did much valuable work, and displayed outstanding merit both as a draughtsman of great skill and a designer of much imagination.

His artistic feeling did not, as is so often the case, prevent him developing a vast knowledge of construction and the engineering side of his work. It was always noticeable that the more difficult the problem the more able his solution of it. Perhaps the best examples of his skill are to be seen in the design of the extension to Sheffield University, where harmony was essential, and also in the new Science buildings at Oxford, on which he was working recently, and where his care and untiring efforts solved some of the most difficult problems that could be found in technical buildings.

Robert was a great sportsman, and took part in many games, including tennis, flying and dancing.

In 1940 he married Elizabeth Ann, daughter of Mr. and Mrs. Poole of New Hampshire, U.S.A.

LETTERS

W. H. ANSELL, P.R.I.B.A.

Presenting Ourselves to Ourselves

SIR,—To complete the somewhat amusing story in your issue of May 1, I think you should print the following letter which I sent to the Editor of the *News Review* and which was printed in that paper on April 24.

DEAR SIR,—I cannot allow the picturesque story in your issue of April 3 to pass without protest. It builds up much of its structure on a foundation which unfortunately is not there, an exciting act, but one fraught with danger to the superstructure.

There is no antagonism between the R.I.B.A. and the R.A., nor between Sir Edwin Lutyens and myself, nor between the R.A. Committee and the R.I.B.A. Committee.

Sir Edwin Lutyens resumed his membership of the R.I.B.A. a few years ago, and it fell to my happy lot to give him a special welcome on the occasion of the annual dinner, which he attended.

There are no more sincere admirers of the fine quality of Sir Edwin's work than R.I.B.A. members. The two Committees are not in competition, their respective purposes are different. The one is concerned only and particularly with London, the other with post-war reconstruction principles and planning as applied to national and civic development generally.

Sir Edwin was invited to serve on the R.I.B.A. Committee; I am a member of the R.A. Committee.

I suggest that you ask your contributor to write his article again and write it different.

London

W. H. ANSELL



RICHARD NORMAN SHAW

BEING a successful innovator has its disadvantages as well as its rewards.

There are several indications in Sir Reginald Blomfield's book* that Norman Shaw suffered from his own success in popularizing such a quickly changing sequence of architectural styles, as when he complained, late in his career, "that in his earlier years he had fought hard for mullioned windows, casements and lead glazing, and that now he had to do all he knew to save his clients from having them." Even more inexorably did his Dutch gables come home to roost, though there is no record of his own opinion of the way the Dutch or Flemish early-Renaissance style, for which he was solely responsible, permeated the whole of English architecture and in many districts dominates the skyline to this day. It is no exaggeration to say that there is hardly a city street developed between 1880 and 1910, or a country house built during the same years, that does not show something of his influence. And seeing that the quality of his own buildings depends on masterly co-ordination and control of the diverse material he conjured out of his fertile imagination, when control was absent, as it generally was in the work of his imitators, it is not surprising that his influence was towards licentiousness and vulgarity.

In other directions, however, English

architecture stands in his debt, and both because of this and because of the extent to which his figure dominates the architectural scene at the end of last century a study of his work has long been needed. Sir Reginald Blomfield has not written a full biography, and still less a critical analysis of Norman Shaw as an architect. His book is a personal memoir, and he writes in the capacity of the only survivor of Shaw's immediate disciples. Inevitably, therefore, he stresses the first person singular. This need not be a defect, since their own associates, by private reminiscence, can often illuminate the lives of great men in ways that historians who rely on remoter evidence cannot. At moments Sir Reginald consents to play this rôle, and when he does so a welcome spark of charm relieves the somewhat humourless tendentiousness typical of nearly all his recent writings. His method of trying to picture the great man's physical appearance, for example, has a fetching charm not unmixed with wit: "The late H. A. L. Fisher was very like Shaw in appearance and address, and when I watch Mr. Verity of Yorkshire bowling at Lord's, his manner of approach to the wicket irresistibly suggests to me one or other of those two very distinguished men."

But generally Sir Reginald casts little new light on the times he is writing about. Instead he has chosen to make his book an opportunity of airing once more his own grievances against later generations, even when those grievances are quite unrelated to Norman Shaw. His antagonism to modern architecture is well known, and one would have thought that he had already voiced his rather ill-informed objections to it often enough;

but the pages of this book are sprinkled with the same old references to "contraptions of the modernists in glass and concrete," with jibes at M. le Corbusier (of whose architecture he seems to have a very sketchy idea), and with other sly

Above, Bryanston, Dorset, Shaw's best known house in his "Queen Anne" style (1890); below, New Zealand Chambers, Leadenhall Street (1872).



* *Richard Norman Shaw, R.A.* By Sir Reginald Blomfield. London: B. T. Batsford. Price 12s. 6d.

digs at people for whom he has now coined the hideous term "modernists." He cannot mention the Royal Academy without dragging in "the guerilla warfare now waged by journalists and critics," and, in short, spoils his book by intruding too much evidence of his personal obsessions.

This persistent flogging of dead hobby-horses on Sir Reginald's part would probably not be worth complaining about if the blindness it evidences were not part of a larger blindness to historical perspective. Writing as a disciple of Norman Shaw, he naturally looks at his career as a prelude to his own, and regards with the greatest respect the monumental baroque phase that closed Shaw's career. Whereas, when seen with unprejudiced eyes, this phase represents not the climax of his career but a regrettable decline when Shaw was content to try and outdo the conventional academicians of his time at their own game and when success had turned his formervirile self-confidence into vulgarity. It is notable that the country house that Sir Reginald Blomfield picks out as his favourite, "Chesters," Northumberland, is just the one that forecasts Shaw's last neo-Palladian style as it blossomed finally in the Piccadilly Hotel. The latter dates from 1905; but it is in his work of thirty years earlier that we have to look for Shaw's real contribution to the development of English architecture, one far more meritorious, though not so spectacular, than his success in making fashionable the variety of outlandish styles already mentioned. His spectacular use of native materials and the free plan shapes he devised in his romanticized Tudor country houses—and especially his promotion of the humble traditional building techniques, such as tile-hanging, to a status within the purview of the sophisticated architect, did much to make possible the later emancipation of English domestic architecture that is associated with Voysey, Mackintosh and others. Although Shaw himself was an eclectic—his interest being in surface textures and picturesque effects—he should not be deprived of his due credit as a pioneer. But Sir Reginald Blomfield gives no indication of the significance of Shaw's work in this connection and only mentions in passing his small houses at Bedford Park in which Shaw for a brief moment appears in person on the stage he helped to set.

Instead of an informed interpretation of the development of Shaw's career, the strangely naive idea takes shape in Sir Reginald's book that there is some inherent virtue and logic in the fact that the styles Shaw chose to revive followed a chronological sequence. It is true enough that his earlier works (following his period in Street's office) are Mediaeval, and that these were followed by Jacobean, then by Queen Anne, and so on, but Sir Reginald speaks of a mediæval essay that dates from his Jacobean period merely as a puzzling retrograde step; he portrays

him as continually pressing forward towards an eighteenth-century Palladianism and even mentions a revived Roman style (presumably after the manner of Sir Charles Barry) as his ultimate destiny. If we accept this somewhat absurd interpretation of events, it is amusing to speculate what would have happened had Shaw lived to catch up, as it were, on his own epoch; and it may be added that a hitherto unknown sketch, a "design for an entrance to a street," which Sir Reginald has discovered and reproduced and which dates from after Shaw's retirement, looks like nothing so much as a caricature by Norman Shaw of the work of his disciple and biographer.

This book contains other peculiar judgements, such as that which describes New Scotland Yard as "a straightforward realization of the purpose of the building, relying for its effect on its proportions, and the admirable use of its materials." New Scotland Yard has some excellent qualities, but surely they are not these. Also that in which Sir Reginald expresses his regret that the Regent Street Quadrant was not rebuilt in "the old London manner with red-brick and Portland stone dressings," an odd wish even in view of his known antipathy to Nash and the stucco architecture of his time. A separate chapter is deservedly given to W. R. Lethaby, who was head draughtsman in Shaw's office, but again Sir Reginald does not appreciate a point of view different from his own. He even accuses Lethaby of not possessing "a cool and balanced judgement," whereas much of his greatness lay simply in the fact that he had balance and a sense of historical perspective denied to most of his contemporaries.

Sir Reginald's book is very lavishly illustrated. It concludes with an appendix consisting of three letters from Norman Shaw to the author (one of which is also reproduced in facsimile), none of much interest but all most flattering to the recipient, and a useful list of Shaw's works. Shaw as a man and as an architect are fascinating subjects, but the definitive book about him remains to be written.

J. M. RICHARDS

LAW REPORT

Meikle and Others v. Maufe and Others

IN the Chancery Division on Tuesday, January 29, Mr. Justice Uthwatt commenced the hearing of an action by Mr. Joseph Abraham Meikle, F.R.I.B.A., of Cantling Avenue, Tulse Hill, Mrs. Clara Ellen Smith (widow) of Bath Road, Bournemouth, and Mr. Douglas Chaplin of Uphill Road, Mill Hill, against Mr. Edward Maufe, A.R.A., M.A., F.R.I.B.A., of Pickering Place, St. James's, and Heal and Son, Ltd., furnishers, etc., of Tottenham Court Road. Mr. Meikle's claim is in his personal capacity and the plaintiffs, Mrs. Smith and Mr. Chaplin, is in the alternative as ex-

cutors of Arnold Dunbar Smith, deceased, for damages and infringement of the copyright in the architectural drawings and plans made by Cecil Claud Brewer and Arnold Dunbar Smith for part of the building occupied by Heal and Son, Ltd., in Tottenham Court Road and in the building as an architectural work.

The defendants denied the infringement alleged.

Mr. C. Harman, K.C., and Mr. J. Mould (instructed by Lee and Pembertons, solicitors) appeared for the plaintiffs, and Mr. Shelley, K.C., and Mr. Guy Aldous (instructed by Sydney Redfern and Co., solicitors) represented the defendants.

Mr. Harman, in opening the case, said it was an action for damages and infringement of copyright in architectural work. The building had now been completed, and though many plans were involved, there was now a block of buildings on the site. There might be an infringement by a plan of a plan or by a plan of a building, yet when dealing with architectural plans, which were going to a builder, and would provide for erection of a building, they could look at the building as erected to see if they were parts of the plans claimed by the plaintiff. In either case the damages would be the same. The plaintiffs' plans were for a new part of Heal's building in the Tottenham Court Road, and plaintiffs claimed that certain parts of the building finally built were an infringement of their plans of which they or their predecessors were the authors. Counsel suggested that his Lordship should see photographs of the building and later pay a visit to the building, as counsel found it difficult to look only at the plans. The plans, he thought, were now rather less important, seeing the building was in existence. The work stood solidly in the street, and the question was whether substantial parts of it were copies of his clients' plans.

Heal and Son, Ltd., were house furnishers and bedding manufacturers, and in 1912 they were minded to rebuild their premises. They were lessees of two blocks of buildings, and the premises were partly on the Bedford Estates and partly on Crown land. Between the two properties there was a party wall, and one of the difficulties Heal's were in was that of persuading the Bedford Estate people to allow holes to be driven through the wall to connect the two buildings. In the present building the parting wall had disappeared, except for a line in the basement which marked the spot of the division of the two properties.

In the year 1910 Dunbar Smith and Cecil Brewer were in partnership as architects. They were employed by Heal's to make enquiries about the party wall and in regard to certain alterations or rebuilding. They eventually provided certain plans, and from those plans Nos. 195 and No. 196, Tottenham Court Road, were rebuilt. Later Heal's rebuilt Nos. 197 and 198-199, and those blocks plaintiffs claimed were an infringement of their plans. Counsel said his clients claimed that they or their predecessors were the joint owners of the copyright in the plans.

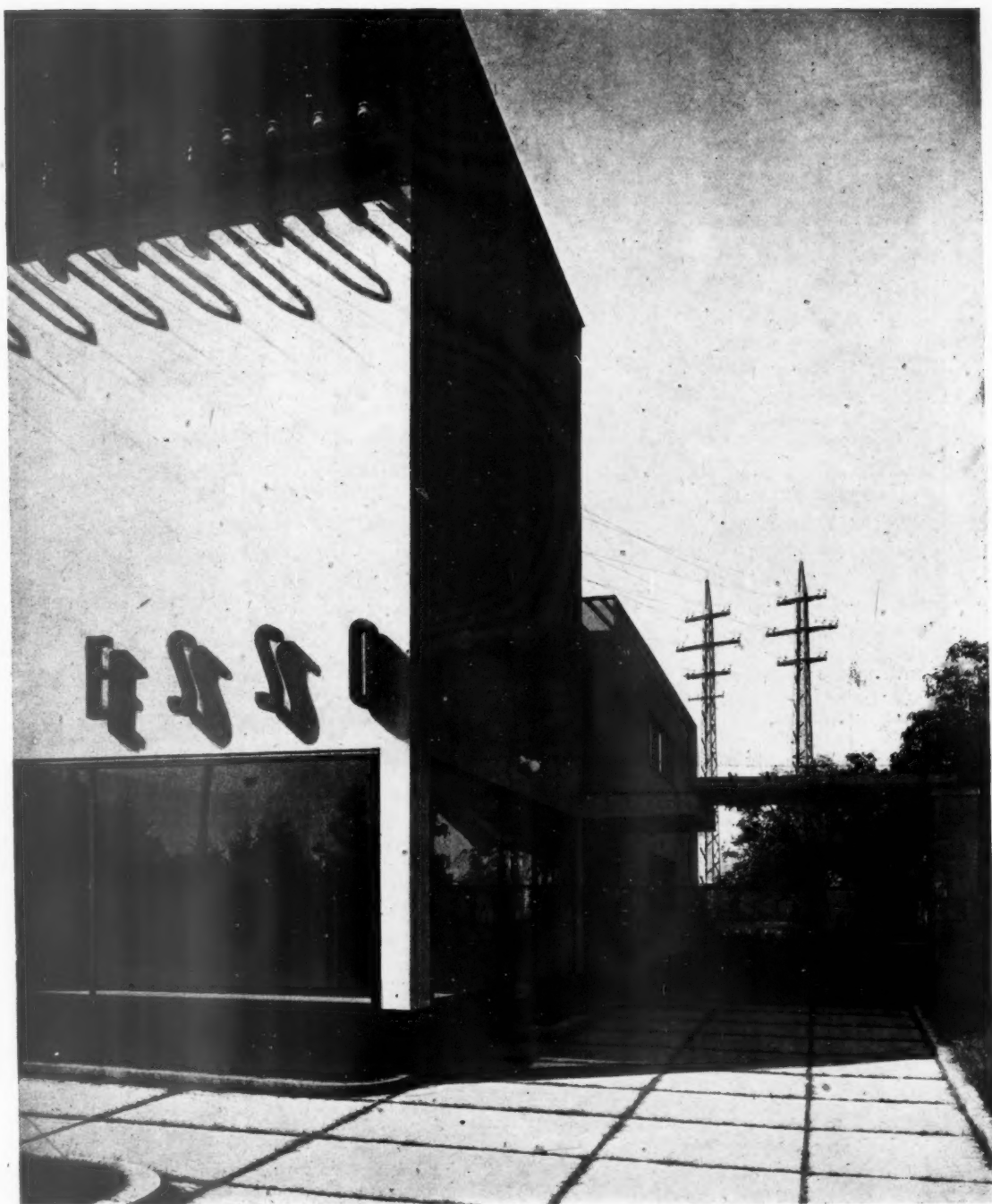
Defendants denied that Smith and Brewer were the first authors of the plans, and in the alternative they pleaded that there was no copyright as alleged in the architecture.

On Wednesday the hearing was resumed.

Mr. Harman drew his Lordship's attention to photographs of the plaintiffs' work on the buildings he designed and photographs of the work on the buildings designed by the defendants, and commented that they were exactly alike, and he mentioned particularly the pillar caps and windows, and bosses.

During Mr. Harman's explanations of the photographs and drawings, Mr. Shelley interrupted and disagreed with many points, whilst his Lordship said he had some trouble in distinguishing the colours owing to the strong electric light in the court. Then Mr. Harman drew attention to

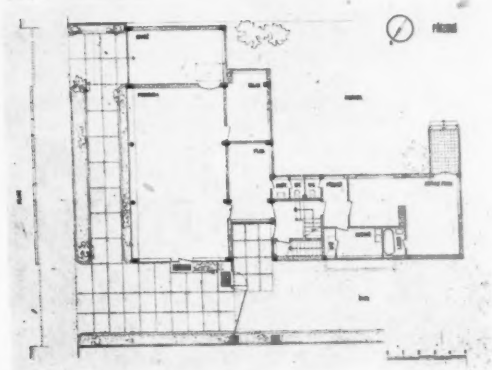
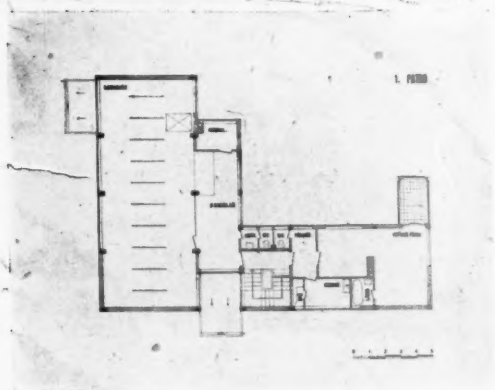
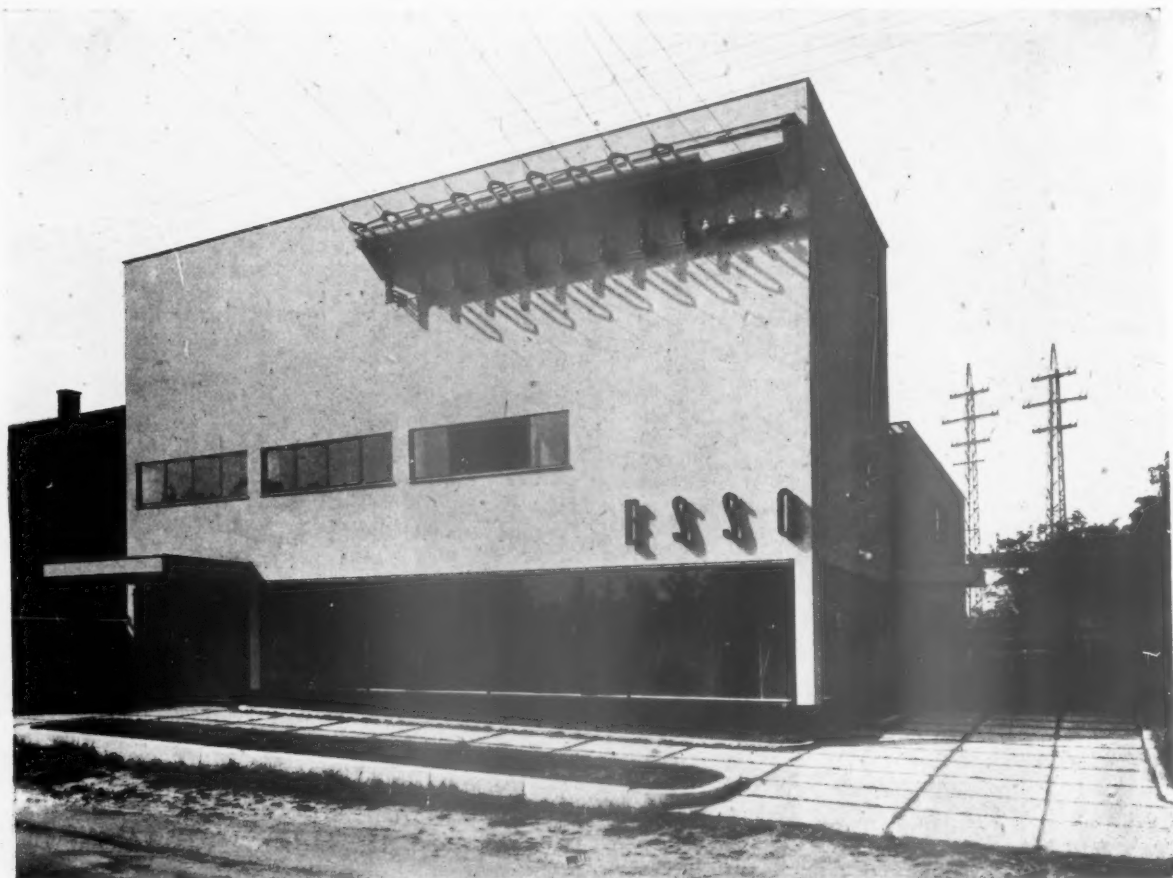
Continued on p. 310.



The south and east fronts of transformer station and showrooms.

TRANSFORMER STATION IN CZECHOSLOVAKIA

DESIGNED BY J. FRAGNER



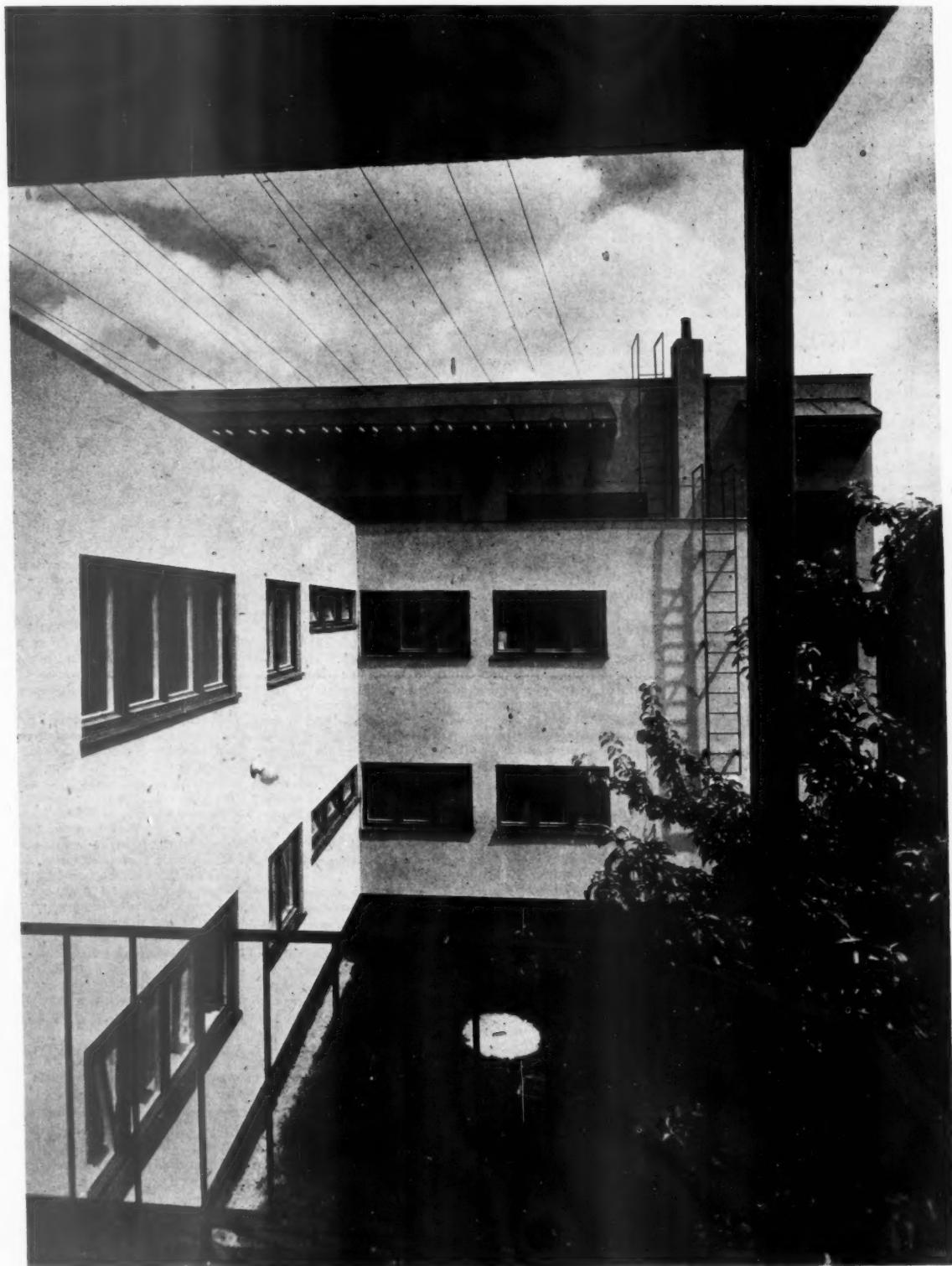
PROBLEM—To house in one building the electricity transformer station and the electricity showrooms for the town of Kostelec. Additional accommodation needed was garage, office, workshop, lavatories and two small flats for managers.

PLAN—On the ground floor are the electricity showroom with small workshop and office behind. In the projecting N.E. wing is one of the managers' flats. On the first floor is the transformer room, attendance and meter room, attendant's office and the second manager's flat.

CONSTRUCTION—Reinforced concrete framing with hollow block infilling, rendered. Windows are of steel on the main front and wood casements elsewhere.

Above : The main front to the showrooms, showing the reinforced concrete hood over the intakes to the transformer room.

TRANSFORMER STATION AND SHOWROOMS IN



*The garden front from the balcony
of the first floor managers' flat.*

CZECHOSLOVAKIA • DESIGNED BY J. FRAGNER

LAW REPORT

Continued from p. 306

certain decorations in the shop, when Mr. Shelley remarked, "They are paper decorations for Christmas."

Mr. Harman: "Very likely. I see I am learning all the time."

Referring to the cretonne cases, Mr. Harman said the defendants had reproduced these exactly.

Counsel submitted that the defendants had not only imitated the outside of plaintiffs' building, but had imitated the inside by an exact copy of plaintiffs' work in many places. Further, said counsel, the characteristic features had been imitated. Even the shape of the panes of glass had been imitated.

Continuing, counsel said a plan was a literary work and the copyright could be infringed. A copy was a copy whether you do it in a building or whether you copy the plan. "I say the making of the new building by the defendant is an infringement of the literary work of the plan. I submit that I could succeed if there had been no building at all, but by showing that the building was a copy of Smith and Brewer plans."

Mr. Shelley submitted that the question was whether there was copying. A similarity was nothing at all.

Mr. Harman suggested that the defendants had copied the plaintiffs' plans, as the exact details given would not be reproduced without being copied from the plaintiffs.

Dealing with the drawings, Mr. Harman pointed out the similarities in regard to the octagonal marble columns with bronze caps, etc., and in the spacing of the windows, which gave character to the front.

Mr. Harman pointed out that on a plan supplied by defendants to the contractors there was written: "Ridge line existing. Contractor to take his own particulars for the job (except where otherwise noted)." This was obvious that the builder was to match up with the existing building, the builder being told to go by the old work and get the details there.

On the law counsel contended that this case came within the ambit of the Copyright Act, an architectural work of art being artistic work.

Mr. Harman submitted that the right of his client to bring this action was clear, as the goodwill of the partnership passed to Mr. Meikle, and contended that the copyright in question passed with it.

Mr. Joseph A. Meikle, one of the plaintiffs, was then called and gave evidence. He said he entered the office of Smith and Brewer as an assistant in 1907. Later he became an outside person, assisting them at times. In 1914 he entered the army in the last war. Smith and Dunbar worked together, and witness worked in their private office. In 1919 he returned to the office, and Mr. Dunbar Smith was then carrying on the business alone. The books of the partnership were in his possession, and the buildings erected and completed in 1917 were from the architectural drawings of Smith and Brewer. In 1923 there were talks about an extension of Heal's premises to the south, and Smith and Brewer prepared sketch drawings for a possible extension to the south. In 1930 further sketches were prepared.

Counsel said the plaintiffs complained that Maufe's drawings and plans of the southern section of the building reproduced the main design for and of the front elevation of the northern section, and that the general plan of the northern section was reproduced in all the showrooms of the southern section, and in particular many of the features in the artistic character and design of the northern section were reproduced—viz., in the frontal elevation, colonnade, the exterior of the showrooms, windows, recessed windows without stone mullions to the third floor, enriched entablature with gilded features, bronze bolt-heads to soffit of the architrave and parapets to gable-end removed and lower ridge line of tiled roof continued and dormer details and enrichment repeated.

It was in 1917 that the first part of Heal's building was completed according to the plans of Smith and Brewer. It was in 1935 that Heal's approached Mr. Maufe to prepare the plans for the extended rebuilding of their premises.

Counsel said it was idle to suggest that his

clients had acquiesced in what had been done.

Proceeding, counsel said that Mr. Meikle had sold for the sum of 40 guineas twelve of the drawings in question in October, 1935, to Mr. Maufe, and there was a suggestion that the copyright passed with them, a contention which counsel repudiated on behalf of plaintiffs.

The frontal of the new building, of which Mr. Maufe was the architect, was, said counsel, exactly similar to Mr. Meikle's design. The drawings which were sold did not refer to Block B, which had been erected.

Counsel referred to an advertisement in the ARCHITECTS' JOURNAL of March 17, 1938, advertising certain contractors' work in which the name of Mr. Maufe was given as the architect of the whole building. Counsel's submission was that the defendants had infringed his clients' copyright. In 1938 Mr. Meikle wrote to Mr. Maufe pointing out that there had been a clear breach of his copyright by the defendants' plans. Mr. Maufe replied resenting the suggestion.

On Thursday the hearing was resumed.

Mr. Meikle's examination-in-chief was continued by Mr. Harman, who asked what was the practice of the firm of Smith and Brewer as to the plans and drawings which they prepared for clients.

Mr. Meikle replied that at the termination of the building or after the final fees had been paid copies of all contract drawings were furnished to their clients. That was in accordance with R.I.B.A. conditions of engagement of an architect.

In October, 1935, Mr. Meikle said, Mr. Maufe phoned him and asked him if he would let him have 22 drawings of the old building, quoting the identification number of each drawing. Witness was astonished that Mr. Maufe knew them. He told Mr. Maufe that he could have the drawings for £75. Mr. Maufe said that was more than he wanted to pay. He suggested that he could do with 12 drawings. For these witness asked £45. Eventually Mr. Maufe suggested 40 guineas, and witness agreed to that. The drawings Mr. Maufe had were tracings in black on white linen. Mr. Maufe never said a word about the object for which he required the drawings. Not a word was said about the drawings being a help to erect new buildings in uniform design with the other part of the building. Witness had no idea what the drawings were wanted for.

Mr. Harman: In your view could there have been any object in having the drawings without intending to infringe the copyright?—It would help him to design the new building in harmony with the original work. I never suspected that the copyright would be infringed, as we held the copyright undoubtedly.

In 1937, witness continued, his partner drew his attention to the photograph of the new building in a technical journal, and witness was then astounded to see that the southern section was a copy of their designs of the northern section.

Witness understood that the extension was to be continued in a contemporary manner—a modern way.

Mr. Harman: Had you any idea that there was any intention to copy your original design?—None. Continuing, witness said in his view the southern section infringed the work on the northern section by the repetition of the wide bay and the narrow bay as an original feature of the design both inside and outside the building. Another feature in plaintiff's drawings were the spacing of the beams. Other features repeated in the southern building was all the ceiling mouldings, which were the characteristic work of Smith and Brewer. They were not traditional. The same applied to the caps and bases of the colonnade, the recessing of the windows on the third floor, and the grouping of the windows between the first and second floors. These were all characteristic features of Smith and Brewer.

Witness added that he believed the Smith and Brewer building was the first one in London to have a colonnade with a covered way within the building itself.

His Lordship: What about the Ritz Hotel?

Witness pointed out that in that case the colonnade was over the public way.

Mr. Shelley said he did not admit that the plans were the work of Smith and Brewer. He challenged the allegation that there had been any copying.

Mr. Harman expressed surprise at that statement.

For the purpose of Mr. Meikle's explanation of plaintiff's design a large drawing of the northern section was hung on the wall of the court at the rear of the witness box, and it stood out in bold relief against the court's oak panelling.

Mr. Shelley, in reply to his Lordship, said the only admission made in the defendants' defence was that the building as a totality was from the drawings and plans of Smith and Brewer, but his case was that the plans did not include all the details to which he took exception.

His Lordship: But is there not a reproduction of an artistic design? The plans have nothing to do with it.

Mr. Shelley said his admission did not say that the whole of the building was Smith and Brewer's design.

His Lordship: It was a lump-sum contract. If all the details are gone into the case will never end. The general admission that one building is a copy of the other is sufficient for the plaintiffs' purpose.

Mr. Shelley: My submission is that this case will depend on the little matters of detail.

His Lordship: The northern building is in all respects from the plans of Smith and Brewer. Do you challenge that?

Mr. Shelley: Yes. Smith and Brewer submitted plans and the building was erected in accordance with the drawings of Smith and Brewer, but no admissions are made in respect of drawings not accepted by the defendant company. We admit that the building erected was in accordance with the general drawings, but do not admit that every detail is similar to plaintiffs' drawings and plans.

Mr. Harman said upwards of one thousand plans had been drawn in connection with this building.

Mr. Shelley said he would not now ask for leave to amend the pleadings on the point he had raised. He would depend on the defence he had put in, that of a specific denial as to the authorship of the plans.

Mr. Harman then questioned Mr. Meikle in regard to details, and Mr. Meikle and counsel went upon the Bench to point out the details as shown on the plans of Smith and Brewer.

Mr. Meikle was questioned as to the plan of a certain part of the building prepared by Mr. Maufe and declared that the builders might find some difficulty in carrying out details from the particular drawing.

Replying to his Lordship, Mr. Harman said the object of going into the details was to show that Maufe's plans were insufficient in detail, leaving the builders to copy the building already erected. The hearing was adjourned.

A.A. SCHOOL OF ARCHITECTURE

Applications for entry into the school on July 8 or October 7 should now be made. Leverhulme Scholarship entries close June 2; Open Entrance Scholarships entries close July 1. Scholarship candidates not submitting drawings this year are advised to commence preparation now for entry next year.

SCOTTISH ALL-CONCRETE HOUSES

The first Scottish housing scheme to have concrete walls, floors, roofs and stairs is now being built for war workers by the Scottish Special Housing Association Limited. The combination of concrete walls with floors and roofs of the same material has only been adopted for housing in isolated cases in Scotland, although these items have been incorporated separately in a large number of houses on previous occasions.



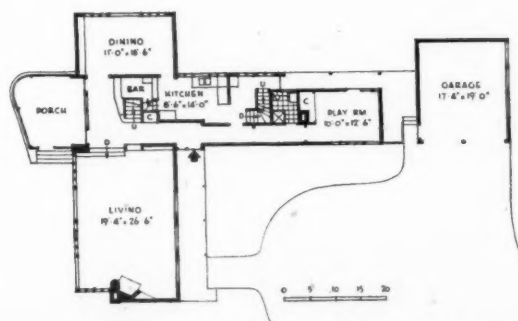
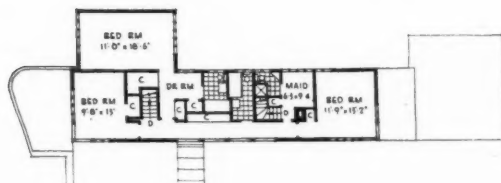
HOUSE IN TENNESSEE

BY ALFRED AND JANE WEST CLAUSS

PROBLEM—A house at Knoxville, Tennessee, on a wooded hill-top. The clients asked that each room should be planned to give its occupants quiet and privacy.

PLAN—The living-room is placed in one wing, the dining-room in another, and the children's room is at the end of the house. Circulation between kitchen and maid's bedroom and w.c. on the first floor is self-contained.

Above is a general view from the north-east.



GROUND AND FIRST
FLOOR PLANS



HOUSE IN TENNESSEE

DESIGNED BY ALFRED AND
JANE WEST CLAUSS

CONSTRUCTION — Foundations: reinforced concrete slab on cinder hardcore. Timber framing with white asbestos cement sheathing to garage, ground floor and west wing, and redwood weatherboarding elsewhere. Chimneys, plinth to porch and living-room south wall are in rough-textured dark red brick. Lighting to hall is by glass brick panels.

The illustrations are reproduced from the "Architectural Record."

Above: The west front.

Left: The main entrance covered way and detail of living-room.

SOME QUESTIONS ANSWERED THIS WEEK:

★ *WHAT materials are best to use to protect a strong room inside a one-storey warehouse from incendiary bombs?* - - - - - Q698

★ *WHAT societies are there in London studying problems of post-war reconstruction, technical and social?* - - - - - Q699

★ *HOW can butter-muslin be fixed to protect tapestry?* - - - - - Q702

THE ARCHITECTS' JOURNAL

INFORMATION CENTRE

THE Information Centre answers any question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry.

Enquirers do not have to wait for an answer until their question is published in the JOURNAL. Answers are sent direct to enquirers as soon as they have been prepared. The service is confidential; and in no case is the identity of an enquirer disclosed to a third party. Samples and descriptive literature sent to the Information Centre by manufacturers for the use of a particular enquirer are forwarded whenever the director of the Centre considers them likely to be of use.

Questions should be sent by post to—

THE ARCHITECTS' JOURNAL
45 THE AVENUE, CHEAM, SURREY

—but in cases where an enquirer urgently requires an answer to a simple question, he may save time by telephoning the question to—

VIGILANT 0087

The reply will come by post.

Q698

ARCHITECT, BERKS.—*I have instructions to build a STRONG ROOM inside a one-storey north light warehouse to contain small safes and books. The PROTECTION afforded by the factory roof AGAINST INCENDIARY BOMBS is negligible and the strong room should be proof against penetration and burning. Protection against burglary is of secondary importance.*

I should be glad if you could advise me as to the type of materials to use—i.e. brickwork, concrete, etc.

The chief incendiary weapon used is the 1-kilo incendiary bomb. It is not necessary to provide a very substantial roof to prevent the penetration of this type of bomb; 3½ ins. of good reinforced concrete is considered sufficient, and no doubt you will be using a stronger roof than this to give protection against burglary. There is no need for the walls to be especially thick to prevent side penetration.

Fires started by incendiary bombs do not differ from fires started by other causes, and any specialists who are conversant with normal fireproof strong rooms should be able to advise

you. The problem is not so much one of building a fireproof structure but of insulating the structure so that papers, etc., inside the strong room do not become charred or otherwise injured by the internal temperature if the structure is surrounded by fire.

If you do not intend employing a specialist firm we suggest the following materials, which should give sufficient insulation to prevent papers charring during a fire of several hours' duration:

1. Insulate the outside of the walls and roof by blocks of foamed slag concrete 4 ins. thick (these can be obtained from Ruberoid Ltd., Lincoln House, High Holborn, W.C. 1, or F. McNeill, 52, Russell Square, London, W.C. 1).

2. Insulate internally with 1 in. of sprayed asbestos supplied by J. W. Roberts, Ltd., Bush House, Aldwych, London, W.C. 2.

If you are not satisfied with these recommendations and want to be assured of absolute protection for a specified number of hours, we can only advise you to consult a specialist firm.

Q699

ENGINEER, HERTS.—*I should be glad to hear of any societies in London working on problems of post-war RECONSTRUCTION, both from the technical and social points of view. I am a Chartered Civil Engineer and have always been keenly alive to the necessities of social and industrial planning. My present employment does not bring me closely into touch with those of like convictions, and I am anxious to join up with a suitable group who are working on these problems.*

We advise you to get in touch with Miss Ledeboer, Secretary to the 1940 Council, 13, Suffolk Street, London, S.W. 1. The 1940 Council is probably the best known group of private individuals who are already working on post-war reconstruction, and although it may not be able to utilize your services at the present time, Miss Ledeboer is in close touch with allied groups and organizations, and she should be able to advise you where your services would be most appreciated.

You might also write to the Secretary of the Reconstruction Committee or Architectural Science Group (R.I.B.A., 66, Portland Place, London, W. 1). The latter group consists largely of architects, engineers and scientists, and is concerned with the technical problems of reconstruction.

INFORMATION CENTRE

Q700

OIL COMPANY, ASSAM.—*We shall be obliged if your Information Centre will answer the following question:*

In the ARCHITECTS' JOURNAL for October 28, 1937, the following statement (page 668) appears:

"The ordinary thermometer is not a satisfactory instrument for determining comfort conditions, and several new instruments which take into account not only air temperature but the presence or absence of radiant heat, humidity, draught and other factors, have been developed, and a scale known as the 'equivalent temperature scale' has been evolved which combines some of these factors."

"Can further information regarding this 'equivalent temperature scale' please be given?"

"The equivalent temperature scale" is dealt with in Appendix 1 of the Report of the Building Research Board, 1937, which consists of a memorandum by Dr. C. G. Douglas, F.R.S., Chairman of the Joint Committee (of the Department and the Medical Research Council) upon research in heating and ventilating. Unfortunately H.M. Stationery Office is unable to supply copies of this Report at the present time, but a limited number of copies may be available from other sources.

Briefly, the memorandum recommends that it is important to have an instrumental method for measuring heating and ventilating effects which will allow properly for the various physical factors influencing human comfort, and further that the instrumental method should be based on the principle of the rate of heat-loss from a heated body.

The "equivalent temperature of an environment" is defined as "the temperature of a uniform enclosure in which a black cylinder, of height about 22 ins. and diameter about 7½ ins., would lose heat at the same rate as in the environment under consideration, the surface of the cylinder being maintained at a temperature which is a precise function of the heat-loss from the cylinder and which in any uniform enclosure is lower than 100° F. by two-thirds of the difference between 100° F. and the temperature of that enclosure."

The Eupatheoscope is the instrument for measuring equivalent temperature, and it was re-designed in 1932. In 1936 the Committee decided that this new design (Mark II) should replace the former (Mark I) design.

For ordinary conditions of artificial

heating, where humidity effects are negligible, the Eupatheoscope Mark II will give reliable records and may be regarded as a standard instrument. The readings obtained will give "equivalent temperatures" as defined above, and these readings may be taken as a basis for comparison of readings taken with other instruments or combinations of instruments.

Q701

ENGINEER, LONDON.—*I have recently heard of GUNNED ASPHALT, which is apparently a process of spraying instead of laying it by hand. Can you tell me who undertakes this work, its advantages, if any, and any other particulars which might be of interest?*

Gunned asphalt has been developed by Consolidated Bitumen and Allied Industries, Ltd., Prodorite Ltd., and the Limmer and Trinidad Lake Asphalt Co., Ltd.

The Limmer and Trinidad Lake Asphalt Co., Ltd. (Trinidad Wharf, Carnwath Road, London, S.W. 6) is operating this new method, and full particulars can be obtained from them. Alternatively, we can refer you to articles in *Roads and Road Construction*, of October 1, 1940, and *Building*, of October, 1940.

Briefly, the process consists of spraying, by means of a flame-gun, a special bituminous compound ground to a powder. The cold powder passes through a ring of oxy-propane flame as it leaves the nozzle of the gun, which fuses the particles but does not overheat them.

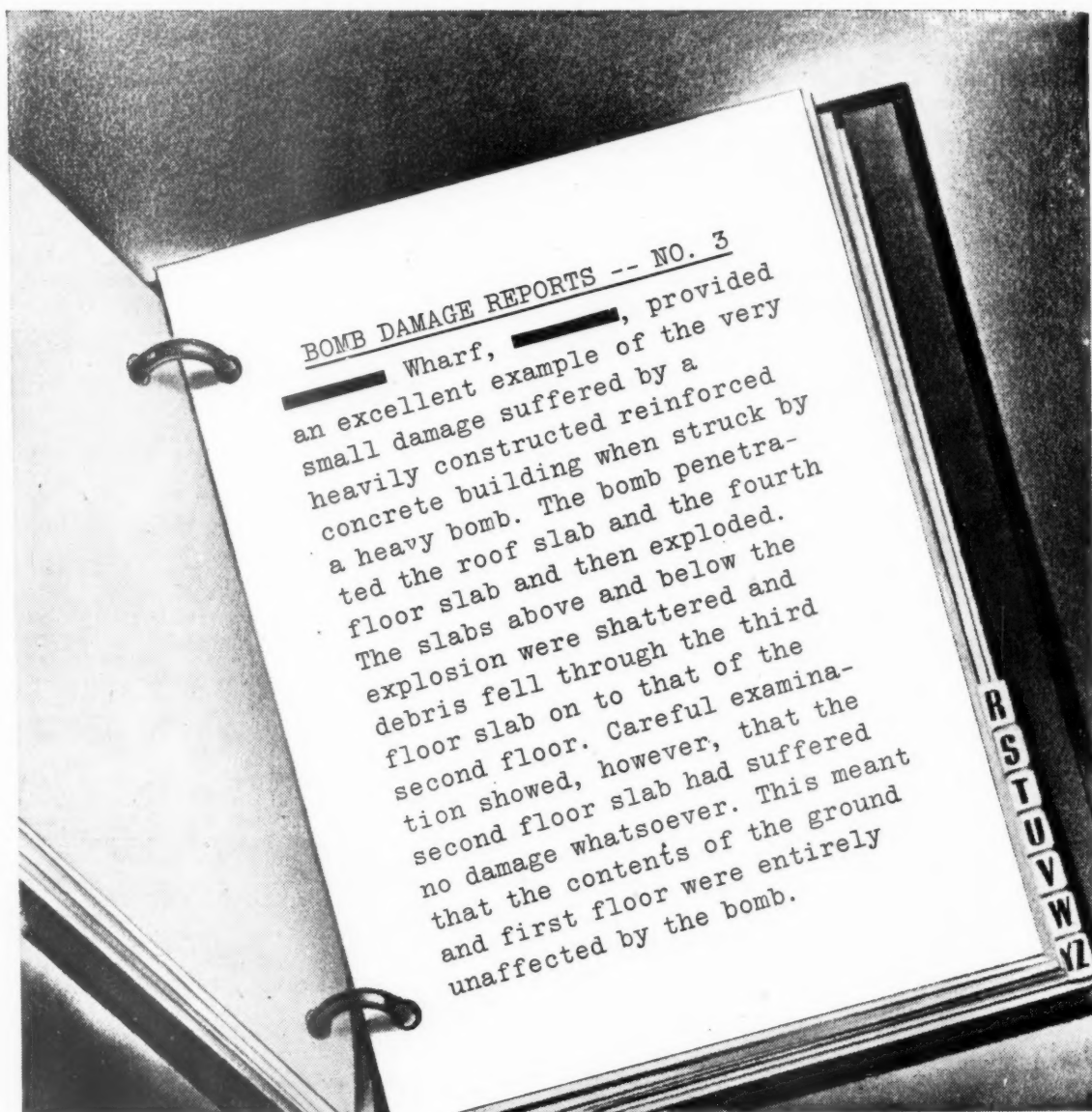
The chief advantages claimed are:

1. A dense, jointless and impermeable layer can easily be obtained.
2. The thickness of the layer can easily be regulated.
3. High speed.
4. A compound can be sprayed on practically any material, including steel and similar smooth surfaces.
5. Ease of working in awkward situations.

Q702

ARCHITECT, SOMERSET.—*Anglo-American Relief Fund for London Children and Mothers. My clients are converting a number of mansions for use as hostels for evacuee children and in some cases have to protect VALUABLE TAPESTRY or wallpaper with a TEMPORARY COVERING.*

It has been suggested that butter-muslin or some cheap cotton material should be fixed to dado rail and cornice so as completely to cover the materials, which are to be protected from dirt or marking only.



Despite the war, building must go on. Urgent Government contracts, workers' housing, hostels and factories make their demands on men and materials. There are now ample stocks of cement. There are scores of contractors, architects and specialist firms who can secure the maximum advantages from reinforced concrete design. In

the hands of such men, reinforced concrete construction proceeds without delay—building goes on through every hour of the 24, in every kind of weather. You make certain of the utmost in economy when the specialist is employed, and buildings, essential to the war effort, can be occupied in the minimum of time.

Issued by

CEMENT AND CONCRETE ASSOCIATION

52, GROSVENOR GARDENS, LONDON, S.W.1

This problem may have arisen elsewhere, and I should be grateful if you could give me the names of any firms who would carry out such work in the Bristol-Bath area, or if you could give directions as to joining the material vertically, and fixing generally.

Butter-muslin or similar material would obviously give little protection against physical damage such as would be caused by a hard article thrown against the wall, or even discolouration by ink or similar materials. We presume, however, that you have already considered this point.

Should you decide upon the butter-muslin we suggest that it should be fixed to wood laths at the top and bottom, which could themselves be fixed to the dado rails and cornices (if these are of wood). Preferably the muslin should be wound round the laths, and the laths should be fixed firmly so that the whole lath is holding the muslin in position rather than the nail heads themselves, which would tear the material. Should the muslin be stretched taut we should imagine that a fairly wide overlap would solve the problem of the vertical joints without any jointing of the material.

Should the dado and cornice be in plaster instead of wood the fixing problem would be more difficult, and we find it hard to advise without knowing the facts. We doubt

whether the material could be firmly fixed by an adhesive which could afterwards be washed off without affecting the decorations.

If this method is not satisfactory it might be possible to form panels consisting of a light wood framework covered with the material. The fixing of these would obviously depend upon the nature of the dado rail and cornice and whether the tapestry extends over the whole wall surface. It might be possible to rest the panels on the dado rail if a lath were tacked on the front to form a ledge, the top either being secured by another lath or by turn-buttons. Similar panels could be made up with a rather stronger surface material, such as really strong black-out paper, building paper or Essex board.

We do not know of any specialists in your district, but we should have thought that this work could have been undertaken by any builder or decorator. We could give you the names of some builders, but we assume that you are already in touch with builders in Bath.

REFERENCE BACK

[This section deals with previous questions and answers.]

Q642. January 30, 1941.

The Industrial Welfare Society has changed its address to No. 14, Hobart

Place, London, S.W.1. The booklet entitled "Canteens in Industry" can still be obtained from this address.

Q675. March 29, 1941

The enquiry was for a "3-pin" drawing pin of foreign make, which we stated in our reply to be unobtainable. We have had our attention drawn to the fact that Messrs. E. N. Mason & Sons, Ltd., of Arclight Works, Colchester, can supply similar drawing pins with a lifter. Mr. H. Phillips, of 34, Marylebone Lane, London, W. 1, can also supply similar drawing pins with lifter, of British manufacture.

TRADE NOTES

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