THE ARCHITECTS' JOURNAL

THE ARCHITECTS' JOURNAL
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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.

THURSDAY, OCTOBER 9, 1941. NUMBER 2437: VOLUME 94

PRINCIPAL CONTENTS

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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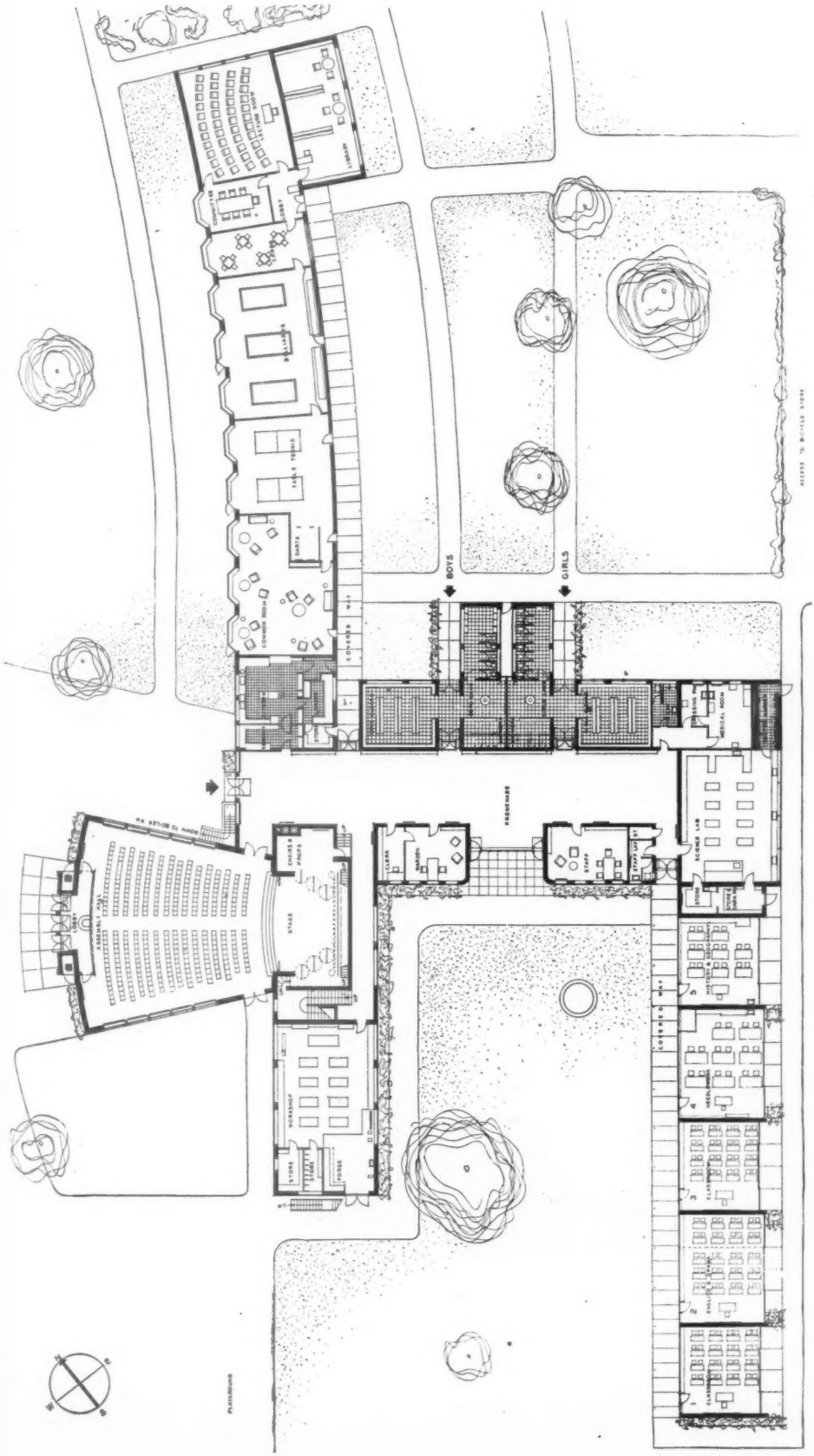
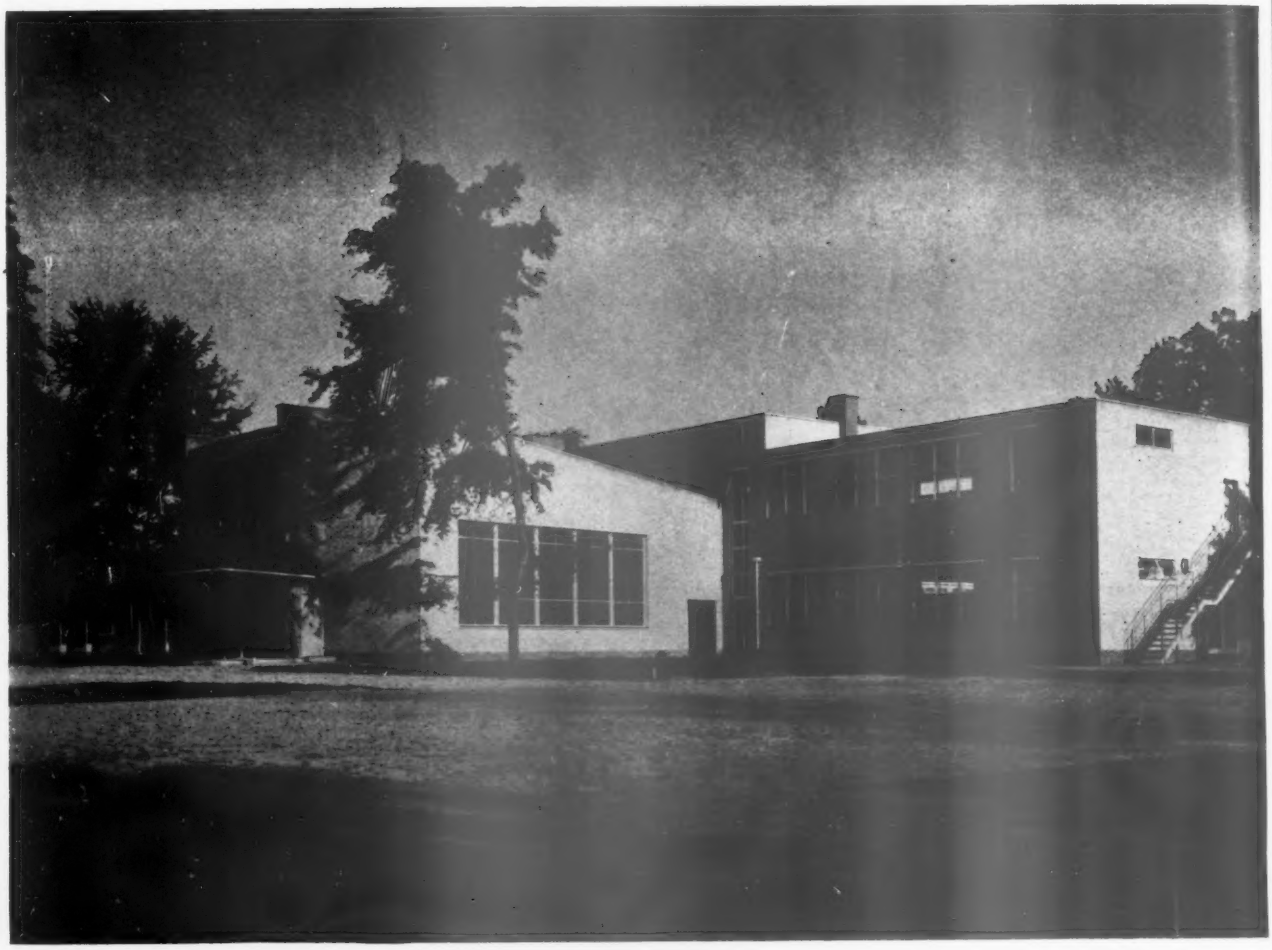
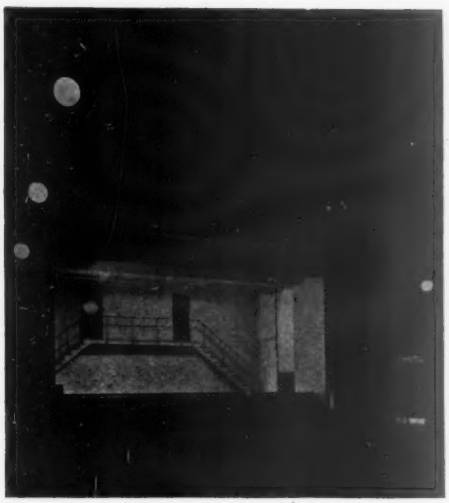
TWO WAYS OF LOOKING AT A BUILDING



On this and page 238 Impington is re-published as it was illustrated in the architectural papers. Further on are pictures showing what it really looks like at work to-day. Mr. Henry Morris, the Cambridgeshire Education Secretary, has divided his county into nine regions and already four of them have their village colleges. Impington, designed by Walter Gropius and Maxwell Fry, is the most ambitious. These colleges are not merely schools. Each one provides in carefully-thought-out buildings a community centre for the whole region. Here the school does not cease to concern the boy or girl at school-leaving age, but caters for their adult life and interests. The core of Mr. Morris's village college idea is the assembly hall, designed for many uses, including a cinema, wired for sound films, a concert hall for chamber music or a small orchestra, a repertory theatre and a lecture theatre. But a notable addition at Impington is the promenade or crush hall. From the promenade, as will be seen from the accompanying plan, all the rooms in the building are approached. It also serves as an informal strolling ground during intervals between school or performances, as an exhibition gallery and as a bad weather playground. The remainder of the accommodation is contained in two wings: the class room wing, housing the senior school and the adult recreation wing used chiefly in the evenings and consisting of a common room, games rooms, lecture room and library. Photographs showing the school actually at work appear on pages 245-248.





A chasm yawns between the way the architect and the way the public sees a building. People see it as a convenience somewhere in the background of themselves; the architect sees it as an entity, with a life of its own which "people" must be allowed to share. In this issue an attempt is made to show how differently the camera even can look at a village school. Here on this page Impington is seen through the eye of the architect, the camera obliging, but further on it is shown as the Smiths and the Browns see it. Though obvious the comparison is not without interest even if only because a building at work *is not often illustrated in the architectural papers. Above, the exterior; left, the assembly hall and the promenade.*

TWO WAYS OF LOOKING AT A BUILDING

SOME POINTS ABOUT HOUSING

HOUSING is a subject which everyone feels that they understand. Perhaps for this very reason few people have taken time to ask themselves exactly what are the needs which a housing programme must satisfy, and what are the different types of people for whom provision must be made. And so important aspects of the problem are apt to be overlooked while details are eagerly discussed.

The first and most outstanding point about housing is that nearly always it is too expensive for the people who want it most. It has been calculated that ten shillings per head per week spent on food is just enough to provide a diet which includes the amount of calcium and the number of vitamins necessary for health. In other words the typical family for whom houses are usually presumed to be provided, consisting of a man, wife and four children (this is the average number of children required to keep the population stationary) needs to spend three pounds a week on food. Gilbert and Elizabeth Glen McAlister point out in their book, "Town and Country Planning," that only 19 per cent. of the principal male wage earners in the country earn more than sixty shillings per week. So the problem of providing up-to-date housing at an economic rent is not limited to slum clearance schemes. It affects the majority of people in this country. Mass production methods of building applied to large areas in conjunction with economical planning of roads and services, holds out the greatest hope of a solution.

The second big point about housing is that each family needs a home of its own, whereas in this country shared homes are common. The number of householders who can afford to pay for the space they need is small; the number who can afford to pay for superfluous space is even smaller.*

When homes are too large they are shared. Sir Ernest Simon declares that some of the worst slums in Manchester occur in districts where houses are let as lodgings. In spite of this, however, many people continue to talk and act as if houses could be provided of a standard type and size, regardless of whether they are to be used by spinsters, bachelors or big families.

It is essential that housing programmes shall in future be more closely related to the realities of the situation than they have been in the past.

Statistics are not the only guide available; they need to be supplemented by a close-up picture of what happens or *should* happen inside a twentieth century family home. How far is it possible for a woman working single-handed to live up to modern standards of diet and hygiene in a home of the traditional type, designed as an isolated unit?† Can she, if she has four children to look after with ages ranging from six months to eight years, hope to make a success of her job? The answer is most emphatically no. If she does what she is told to do at the child welfare centre she will have to devote between four and five hours a day to the youngest child alone. Shopping to buy *fresh* food every day may take an hour and a half or more; and preparing three good meals, one in the morning for the whole family, one at midday for the children, and one at night for the man may take another two or three hours. When this is finished enough work remains over to occupy another day. The result is that most married women either do not have four children, or else do not attempt to live up to modern standards, both of which courses of action give rise to grave public concern. The so-called modern home is about as efficient for its purpose as a hand loom for weaving.

There are ways of reducing hours of work; they include fittings such as vacuum cleaners, refrigerators and telephones; installations such as the Garchy system of refuse disposal, district central heating and hot water supply, communal services such as creches, nursery schools and restaurants. Most of them can only be provided if homes are planned not as isolated units, but as parts of a group, sharing certain facilities that are provided externally. Let us see to it that the new homes provided during and after the war are capable of being equipped both internally and externally in a way that conforms to modern standards.

Sometimes a distinction is made between temporary and permanent housing. But the only kind of home that is genuinely temporary is a caravan. Every other implies the laying of certain fixed services which need not, but almost certainly will, determine within narrow limits the position of future buildings. The way buildings are grouped is now quite as important as the way they are constructed. Conditions have changed since the time when each householder was genuinely independent of his neighbour, relying on his own well, privy and right of way. The architect now must work within a framework of public or semi-public services. And unless these are carefully planned his best efforts are foredoomed to failure.

*Gilbert and Elizabeth Glen McAlister state in their book, "Town and Country Planning," that in London to-day the number of families who occupy a structurally separate dwelling, including every kind of self-contained flat or masionette designed as such, is only 37 per cent. of the population. The rest share. In other words 63 per cent. of the population live in dwellings which are half-way to becoming slums and steps should be taken to pull most of them down before they have time to deteriorate further.

† Hotwater boiler, gas cooker, copper with fire under to be lit on washing days, coal fires and dustbin in the yard.

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NOTES & TOPICS

THE BRITISH ASSOCIATION

THE Scientific Profession—interpreting their work so broadly that it covers almost the whole of rational thinking—have recently tried to define their usefulness. The occasion was an international conference held by the British Association for the Advancement of Science in the last week-end of September. For three days the high-ups of the profession discussed the influence of science on Government, Human Needs, World Planning, Technological Advance, Post-War Relief and the World Mind.

★

The best papers, for instance those by Sir John Russell on "The Impact of Science on Agriculture," or by Sir John Orr on "Nutrition," showed the astounding awareness of natural laws which has been slowly achieved in some sections of science. In feeding human beings it is actually possible to define an optimum standard, and to use this as a basis for a world-wide policy on food supplies.

★

Sir Harold Hartley who told me, rather surprisingly, that his interest in architecture first came from his pleasure in Ruskin's sketches, read a factual and yet very imaginative paper on "World Heat and Power Requirements and Their Social Implications." Would that the town planners and the architects had been equally definite and comprehending. Perhaps Mrs. Neville-Rolfe found the reason—she reminded the Conference that the human intelligence quotient reaches its maximum at 14, that Pitt was Prime Minister at the age of 23, and that bold planning must be done to a large extent by those under 25.

★

The clearest demands for the deliberate control of environment came from Prof. Luther Julik, describing the T.V.A., and from Dr. Needham, Mr. H. P. Vowles, Mr. Maurice Dobb and Prof. Haldane, who identified socialism with rational planning and quoted Soviet examples of it. Mr. Dobb thought that capitalist enterprise failed to develop scientifically for two reasons—it was frightened of sufficient expansion, and it was unwilling to allow initiative to the workers on the job. But Prof. Alvin Hansen, speaking about the United States planning board and public works developments, thought that world prosperity would follow the prosperity of American business, with Federal assistance—"land could be used for public development if unsuitable for private enterprise"—and from its extension by international investment. Lord Hailey, with due deference to "the investing public" described the social functions of the State in the colonies.

★

Breaking through these discussions were the references to the war, its technical requirements, and the use of scientific man-power. The Association of Scientific Workers had two speakers on these subjects. There were also several excellent if more limited technical papers—for instance on locating industry, by Prof. Sargent Florence, on plastics, by Mr. A. J. Couzens, and on scientific methods of designing and supervising building, by Mr. O. Arup.

PICKING US OVER AGAIN

"A cynic might say," wrote the *Manchester Guardian* last week, "that in the last two years British industry has adapted its nomenclature to that . . . of the Schedule of Reserved Occupations." And it went on to state its belief that Reserved Occupations must soon release a very large number of men.

★

The *Manchester Guardian's* cynic is not likely to be alone in his cynicism. It is even possible that a number of architects are at present sailing under disingenuous if not wholly false colours ; and this, if it is so, is very reprehensible. But when one examines the facts of the architectural situation as they affect war building (than which, we must remember, No Work is More Important), it seems . . . well . . .

★

Consider :

(1) An examination of a typical war building scheme shows that just about half the work of design and supervision would have been allotted in peace-time to architects and the other half to civil engineers.

(2) Each half of the work would have required in peace-time men of the appropriate profession in about the following age-numbers ratio : Aged 50 and over, 1 ; 35 and over, 1 ; between 20 and 35, 8.

(3) There is no firm line of demarcation between the work of architects and engineers. It is possible (although inadvisable) for six architects and one engineer to execute a large amount of tolerable civil engineering work and *vice versa* exactly.

★

If one accepts these contentions and then looks up the Schedule of Reserved Occupations, the absurdity of the present situation can be appreciated in all its fragrance. Civil engineers, civil engineering draughtsmen and even civil engineering students are reserved almost from the moment they choose their profession. Architects are not reserved until 35 and, until this month, architectural assistants (the backbone and viscera of the profession), were not reserved at all.

★

Who then has been doing the half of war building which any fully informed person in 1938 would have handed over to architects ? Three answers seem to share the honours between them. It has not been done at all ; it has been done poorly and with distaste by engineers ; and it has been done with enthusiasm by some architects over 35 and by some under 35 disguised as something else.

AND IN FUTURE ?

Let us now foresee a Government decision to act on the *Manchester Guardian's* leader. A triumvirate composed of a

Ministry of Labour officer, an architect (over 35) and a civil engineer (any age over 18), descends on every office designing war buildings to hold an enquiry. Each man is catechized and every man under 35 whose work is judged to be more architectural than engineering is promptly outed.

★

That is logical, that is what the Schedule says. It is true that hostels for munition workers or blitzed families are 90 per cent. an architectural job ; that it is impossible without compulsion or great waste of money to staff an architect's office only with men over 35 ; that the materials, conditions and geographical position of most war building schemes all demand youthful characteristics in those who have to solve their problems. Still—that is what the Schedule says.

★

Before it is decided that what the Schedule says is what is going to be done, it does seem that the R.I.B.A. is entitled to put two questions to the Cabinet. Why should the work for which a profession has been specially trained be turned over to another profession just because the authors of the Schedule did not know how the building industry works ? How do you suggest that the architect's half of war building is going to be carried out in future ?

PATHS AND FENCES

The design of communal living accommodation consists largely in watching out that the practical and psychological factors don't butt each other in the eye.

★

For instance, it was decided at B— that the paths linking sleeping huts with the social building should not be of continuous tarmac with a good camber but of concrete slabs about 18 inches square ; these would enable the occupants to imagine they were pacing a Palladian terrace or a Highgate roof, according to taste. What no one thought of (except perhaps the soulless engineer who suggested tarmac) was that these flags would settle, sometimes in the middle, sometimes at the edge. Given a black night, some heavy showers and a pair of slippers, progress to and from the social building becomes I am told a quaint aquatic obstacle race from which the spirit of fun is absent.

★

There are no fences at B—. It was decided that a hostel for the workers in a certain factory should not be surrounded with fences. It was, in the words of a visiting Big Shot, to be " open and welcoming ! " It was. The operatives lost their shirts, watches, small change and bicycles, and the management lost a radiogram.

★

Action was taken and passes were instituted. But operatives who had to carry up to a poker hand of passes to earn their daily bread jibbed at carrying another in order to eat it. Eventually the manager, overcome with the nervous strain of continually slapping pockets and risking a black eye from his patrons, took more action. An unclimbable barbed-wire-topped fence began to arise about the precincts.

★

The next day the manager had to face one more indignant deputation from front-line workers. " Hey . . ." he was asked, " wot d'you think we are in here—prisoners of war ? "

PLAYING BALL

In conversational English the phrase " to play ball " is probably used more often as meaning " to come to an understanding " than in its literal and proper sense. Even in America, however, words sometimes mean what they say, as many a puzzled client of the late Mr. Charles Ebbetts, architect, of Flatbush, New York, must have discovered after letting drop this (as he thought) harmless phrase.

★

For Mr. Ebbetts was not only an architect, he was the owner of the Brooklyn Dodgers, a baseball team now rocketing to fame in the U.S.A. Fifty years ago when Mr. Ebbetts began his easy-going, casual stewardship, the team was not so famous, nor so successful, but there was a pleasant family atmosphere about it which consoled the Brooklyn inhabitants for lost matches and poor " gates." Mrs. Ebbetts washed the players' uniforms and Mr. Ebbetts sold tickets at the turnstiles. In 1913 Mr. Ebbetts sold a half-interest in the team to a Brooklyn contractor called Mckeever for 100,000 dollars, and to-day the descendants of these two families each hold a fifty per cent. interest—surely the strangest ever partnership between an architect and a contractor.

★

Perhaps the most outstanding event of the Ebbetts-Mckeever direction, as related in a recent number of *The New Yorker*, was the day when an outfielder called Johnson succeeded in breaking his leg whilst standing still. He leaned forward to start after a ball and then discovered he had one foot in a hole.

★

For the uniniated baseball is a very highly organized and dangerous form of rounders, and if you wish to buy a top-rank player he will probably cost you at least 50,000 dollars. It is not, you will see, a hobby for the young architect who has built a £1,000 house for his aunt and feels nothing can stop him now.

DE MORTUIS . . .

Glancing through a daily newspaper a few weeks ago, I came upon an obituary notice. When allowances were made for wartime's crushing restrictions on space it was quite a long notice—about four inches in small type.

★

I read that its subject had been a famous rowing man, rowing coach and rowing correspondent and had taken part in several famous races. I read on with just the amount of interest needed to keep going to the end ; and just at the end I came on the words " By profession Mr. Blanque was an artist and architect."

★

The last few minutes of my train journey were passed in wondering what Mr. Blanque would have thought of his obituary notice, which could only have appeared in an English-language newspaper. No doubt he would have been pleased that his rowing prowess was so handsomely acknowledged. But unless he regarded rowing as his life's work—and few Englishmen so regard a sport—he must surely have been a little hurt by the nine words which dismissed the rest of his labours.

★

But perhaps he would have realized that an architect of much greater eminence who lacked the rowing Blue, would not even have got the nine words.

ASTRAGAL

NEWS

★ New Hours of Employment for Builders This page

★ Women Architects' and Reconstruction Page xxii

REGISTRATION OF BUILDERS

No building or civil engineering contracting business may now be carried on without a provisional certificate of registration by the Minister of Works under Regulation 56 AB of the Defence General Regulations, 1939.

All registered undertakings must now observe the standard terms and conditions of employment recognized in the industries. Any building or civil engineering contractor who fails to comply with these conditions is liable to have his registration certificate cancelled. If the certificate is cancelled, he will be unable to carry on his business.

Those building and civil engineering contractors who have been paying wages differing from the generally recognized rates and working longer hours than the maximum of 60 per week worked on Government building contracts, must discontinue all such departures from the recognized terms and conditions of employment as from October 1.

Maximum hours have been fixed at 60 as output deteriorates if longer hours are worked for any appreciable period. In specified emergencies more than 60 hours per week may be worked, but this is *not* at the discretion of the contractor. Sunday working is not normally permitted.

The recognized terms and conditions in the industries are fixed by joint negotiation, and the hours of employment were laid down by the Minister after full discussion with the industries. The Minister knows he will have the co-operation of the industries in making these conditions effective in view of the loyal assistance they have given to him in the past.

The approved conditions as to hours of employment are as follows :—

(*a*) Not more than 60 hours a week are to be worked on weekdays.

(*b*) Sunday work is not permitted, except in the following circumstances :—

(i) Air raid damage repair of services, war factories and essential houses immediately after a blitz (normally for a period of 14 days).

(ii) Any work of exceptional urgency in the war effort authorized by the Ministry of Works.

(iii) Any work requiring to be carried out without delay, as a result of any serious local emergency on an important job for example, collapse of a trench or similar mishap ; or any other emergency repair work necessary in the interests of health, safety, etc.

(iv) The classes of work normally done during week-end, such as repair of construction plant and equipment, relaying of construction tracks, concentration on any individual portion of a contract or specialist sub-contract which is holding up work, where continuous working is necessary, such as tunnelling, tunnel lining, or concreting, where continuous work is necessary, drivers of mechanical digging and scraping and similar machinery, timbered trench work, or dewatering, work in treacherous ground, compressed air works, etc.

(v) Railway work, where for traffic reasons week-end work is necessary ; and tidal work.

(vi) Unloading of railway wagons, transport conditions rendering it necessary to release wagons with minimum of delay.

(*c*) For individuals working on continuous operations such as tunnelling and shuttering work, the working week must not exceed six days (including Sunday, if worked), nor the total number of hours 60.

ADVERT

As a result of the War the British Government has become the biggest advertiser in the world. The National Savings Committee by itself has recently been using more space in the newspapers than all the aspirin and headache cure manufacturers put together. A new technique is being evolved. Advertisers are beginning to think of an advertisement as the considered statement of a group of men conscious of a duty to the public. Here are two advertisements reproduced from Modern Publicity in War—reviewed below. Consider in the Billy Brown one the snake-like cunning of the word "could."

LITERATURE

WORLD'S BIGGEST ADVERTISER

[By CHRISTIAN BARMAN]

For some time now a number of museums and universities, both here and in the United States, have been collecting English posters and advertisements, both the official and the other kinds, towards a documentary history of the war. They need pursue this labour no longer. Mr. Mercer and Mrs. Lovat Fraser have done the job for them in *Modern Publicity in War*. I can think of no worth-while publicity scheme of the first two years of the war that is not represented in this admirable collection.

The period covered by their record is peculiar not only for the impact of war upon the country's life in general,

T I S I N G

The office says that BILLY BROWN
Is far the nicest boss in town.
For instance, since the Blitz began,
He's organised a simple plan
Whereby his staff or most of them
Are off for home by 4.0 p.m.
We wish that every boss in town
Could do the same as BILLY BROWN

printed for
London Transport

but for a revolution in advertising itself that is bound to have far-reaching consequences. It was during the year and a half to the spring of 1941 that the Government of Great Britain became the biggest individual advertiser the world has ever seen. During the first quarter of 1941 the Government spent no less a sum than half a million pounds on press advertising alone ; the National Savings Committee by itself used more space in the newspapers than all the aspirin and headache-cure manufacturers put together. Advertising has indeed entered a new stage in its strange and exciting career.

Mr. John Gloag, in a long analytical essay, points to some of the characteristics of this new advertising. He shows how it has benefited from the ability of the Government to plan on a big scale, and how publicity campaigns have gained a new importance by being "started off and invigorated at intervals by pronouncements by Cabinet Ministers — pronouncements that are 'news.'" More significant is the fact that, in an age when commercial advertising was tending more and more to rely on the effect of anxiety and fear, the Government has steadfastly refused to appeal to these emotions. Mr. Gloag rightly praises Lord Woolton and the work of his Ministry. "Can any other country," he asks, "claim ministers who possess such civilised good humour?" and he puts this great national characteristic down to the chastisement handed out by Dickens to the official mind when he made us rock with laughter at his egregious Bumble.

So far the effect of the Government's example upon advertising of the ordinary commercial kind is mainly seen in a greater degree of seriousness and decency and a growing sense of responsibility. Advertisers are beginning to think of an advertisement as the considered statement of a group of men conscious of a duty to the public. Firms like Ryvita, Milton Proprietary, Wolsey and the Ford Motor Company have some good examples in this book. Architects will note with interest that building manufacturers do not lag behind ; it is clear that firms like Henry Hope, Aluminium Union and Pilkingtons can do as well as anybody. The movement is only beginning ; it may lead us a long way yet before we see the end.

[Modern Publicity in War (Modern Publicity, 1941). With an introduction by Sir Cecil M. Weir, K.B.E., M.C. Edited by F. A. Mercer and Grace Lovat Fraser. The Studio Publications. 12/6 nett.]

LETTERS

F. R. S. YORKE, A.R.I.B.A.

DAVID PERCIVAL, A.R.I.B.A.

E. G.

M. DEMAX

Collaborate with Russia

SIR,—John Gloag is not being fair to the architects he names in his letter in your issue of September 18. Does he really believe we could be smug enough to think we have nothing to learn outside England ?

On analysis, his letter says we in England are doing splendidly, we have always done splendidly, and we are quite capable of going on doing splendidly ; we have the evidence of the last 20 years to show just how splendidly we have been doing.

Mr. Gloag appears to see, now, in England, the whole, happy population comfortably housed in delightful haunts and a good enough life in the future without the great changes involved in social planning. He does not seem to have been moved by the magnitude of the reconstruction problem. If there is to be no social reconstruction, and tidying up is sufficient, then there is probably nothing we can learn anywhere, but if reconstruction is to mean what we are promised it will mean, we shall have so much to do, in so short a time, in a field where we have no experience, that immediate and immense help can be gained from Soviet experience. This was the gist of the letter to which Mr. Gloag takes exception. It did not suggest we should *copy* Soviet architecture or Soviet methods.

Russia is the one country that has faced the problem that confronts us now. What is there we have done in the last 20 years that gives hope that we are so well equipped to tackle reconstruction that we can learn nothing from Soviet Russia or elsewhere in Europe—a million villas and the Birmingham Civic Centre? It seems a very little while ago that you devoted space in half a dozen or more issues to articles by Mr. Gloag telling us how well they were doing in America and Nazi Germany.

F. R. S. YORKE

Eccleshall.

SIR,—If Mr. John Gloag had deliberately parodied the letter of a Little Englander on the above subject, he could hardly have bettered his protestations in your issue of September 18. He contrives to be at the same time, peevish, smug and obsequious.

This sudden glorification—one might almost say deification—of the English genius is especially inappropriate from Mr. Gloag who, in his day, has helped to promote the sales of such alien commodities as Aga cookers, Otto stoves, aluminium, Ryvita, plywood, etc. In the light of this his letter seems not only absurd but even, maybe, insincere.

The world can share its Tennessee Valley Authority, its Welwyn Garden City, its Dnieprostroi and new Moscow as truly as it can share the imagination of the designers of cookers or wallboard—even though the former group are not exportable commodities and are therefore outside the range of commercial interests.

We can be confident, as British citizens, that our Britain is best—and such a confidence in *their* country must underlie the courage shown by Russian workers and peasants. We can be proud—yet not too proud to benefit from the experience of others.

In the current number of the *New Statesman and Nation*, I have just seen another letter from Mr. Gloag, in which he takes the same line. Does he intend to give the same energy to sabotaging Anglo-Soviet technical collaboration as he gave to promoting commerce with other foreign countries a few years ago? If Mr. Clough Williams-Ellis and the rest were advocating closer contacts with the U.S.A.—trite though the proposal would be—Mr. Gloag would be one of their most enthusiastic supporters. Why the difference?

DAVID PERCIVAL.

London.

SIR,—The ignorance of history displayed in T.H.C.'s letter in your issue of September 25, 1941, only rivals his manifest ignorance of current technics and in particular of building technics.

For the past 5000 years or so, the basis of architectural progress lay in the exchange of ideas on the subject, on an international scale. Nations throughout the world thought out and found inspiration in each other's achievements. Only the most primitive communities cut off from the rest of the world by insurmountable geographical barriers, were left aside by the general progress of human culture and were doomed to vegetate in a sterile and miserable "autarktic" civilization.

The architecture of these Islands is a living monument to the fact that its virile inhabitants were always able to absorb and integrate all that was best in technical and artistic achievements on the two sides of the Atlantic, indeed from all over the world. Does T.H.C. imply that this nation has degenerated into an inept and senile tribe, no longer capable of digesting what others bring to the general "pool" of human knowledge? Has he been stung to such an extent by Schickelgruberian propaganda as to think that only "THE" herrenvolk have the right to the knowledge and the achievements of humanity, while the others have to cut themselves off and mind their own business?

Norman, French, Italian, Dutch and American influences (to mention only a few) have in turn soiled the virgin purity of British architecture. The shame has been amply revenged, tooth for tooth, eye for eye. To mention only a few instances: modern domestic architecture throughout the world bears irrefutable signs of British paternity. Then we must not forget Paxton, Voysey, Mackintosh, Norman Shaw (to quote at random).

With regard to Frank Lloyd-Wright and his "organic architecture," one may refer T.H.C. to the theorists of this country at the end of the last century, while Frank Lloyd Wright's architecture itself is a striking example of Chinese and Japanese influences in America. Contrariwise, his Imperial Hotel in Tokio is good America-invented structure (one of the few to survive the earthquake) in the alien land of Japan.

The well-known platitude about "the Eskimo's igloo . . . and the Arab's tent" is completely irrelevant as they are the results neither of planning nor of an advanced technic. I can assure T.H.C. from my personal experience that the tent of the Arabs is as suitable a habitation for them as an East London slum for the Londoner. I understand that the slum dwellers do not live in the slums for choice. Unfortunately, I have no first-hand experience of the igloo, but judging from accounts of the health standards in those parts it does seem to be an unsuitable dwelling even for Eskimos.

All this ostrich policy is no good. It is no good telling history to stop, to go so far and no farther. It just won't do. The cogwheels are geared to each other and TIME MARCHES ON.

E.G.

London.

W.C.

SIR,—You published (Sept. 25) plans of houses being erected at Haydock. The one w.c. can only be approached via the dust bin and the fuel. Why? I defy any housewife, working under present conditions, to be able to organise such a "corner" that it isn't essentially a "back yard." Then there is the outside approach to the w.c. Very little adjustment, and perhaps a few more bricks would provide a ventilated lobby, with inside access.

M. DEMAX

London.

REPAIRS TO DAMAGED GEORGIAN HOUSES

The Georgian Group, the Society for the Protection of Ancient Buildings, have issued the following leaflet:—

Although lamentably thousands of Georgian houses have been damaged beyond repair, it seems likely that a greater number will survive the war with only minor damage to roofs and windows. It is hoped that members will let no chance go by of exhorting owners of such houses to restore the glazing bar when permanent repairs are possible. Generally the glazing bars get swept out or broken with the glass panes, and there will be a great temptation on the ground of cheapness to restore the windows with large single sheets of glass. Where this mischief had already been done through ignorance, or fashion, before the war there will be an excellent opportunity to restore glazing bars and so actually secure some small positive return out of the present tragedy of destruction.

It is of the utmost importance that owners should have the matter explained to them before thousands of uninstructed builders can replace windows without the glazing bars. It is hoped, therefore, that many members either personally or through their local societies will, while there is still time, volunteer advice not only in general terms but to individual owners in their districts.

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THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

GENERAL CONSIDERATIONS & PRINCIPLES OF DESIGN IN WELDED STEEL, Nº 6 :

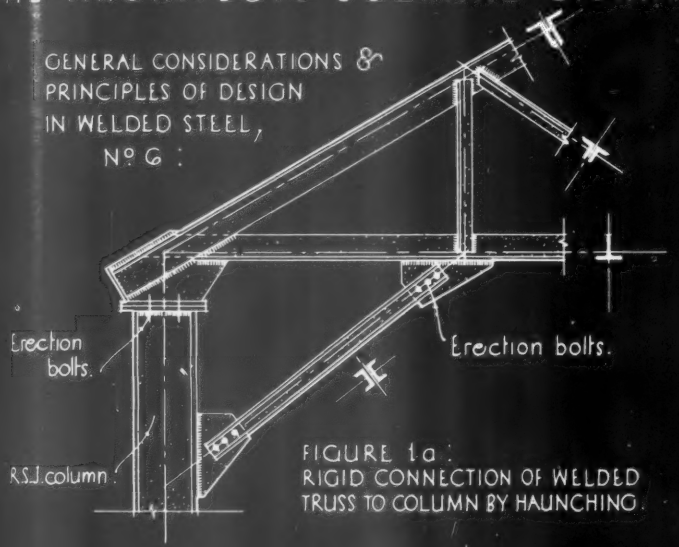


FIGURE 1a : RIGID CONNECTION OF WELDED TRUSS TO COLUMN BY HAUNCHING.

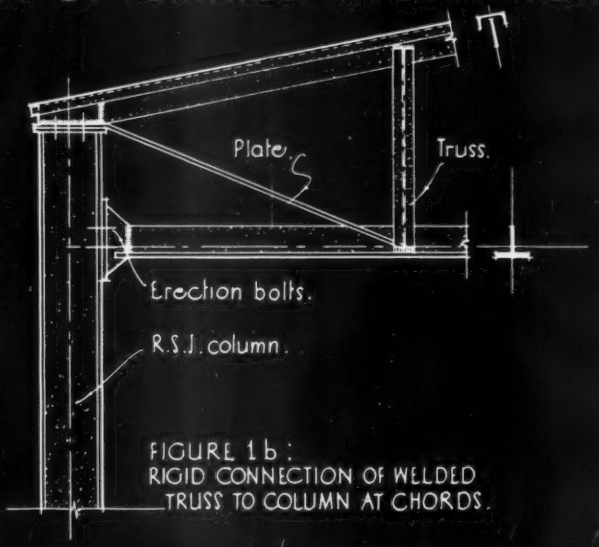


FIGURE 1b : RIGID CONNECTION OF WELDED TRUSS TO COLUMN AT CHORDS.

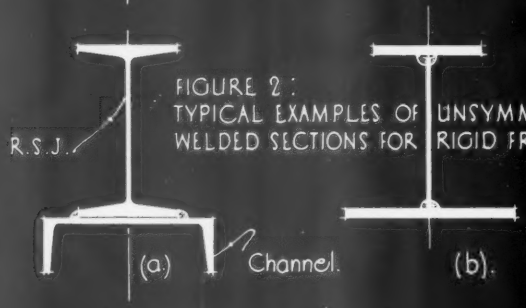
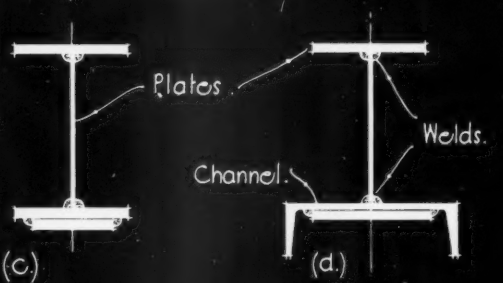
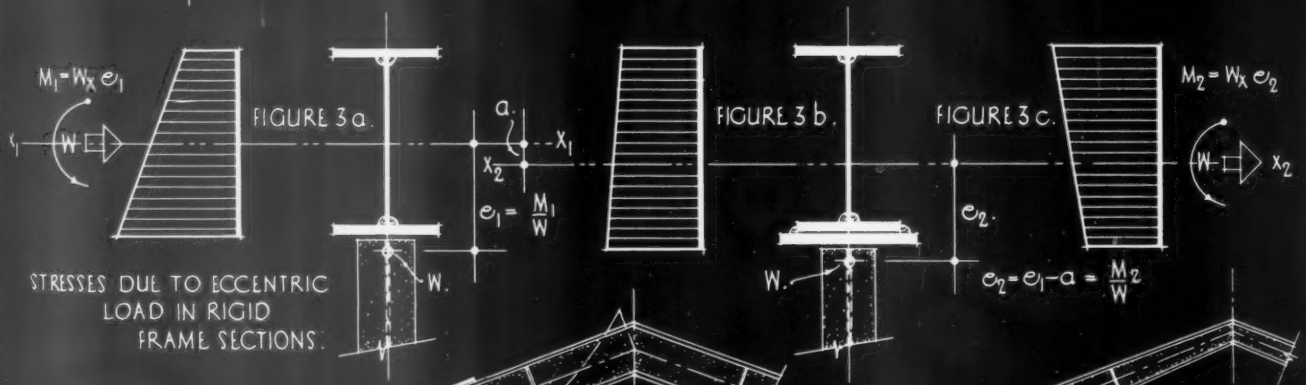


FIGURE 2 : TYPICAL EXAMPLES OF UNSYMMETRICAL WELDED SECTIONS FOR RIGID FRAMES.





STRESSES DUE TO ECCENTRIC LOAD IN RIGID FRAME SECTIONS.

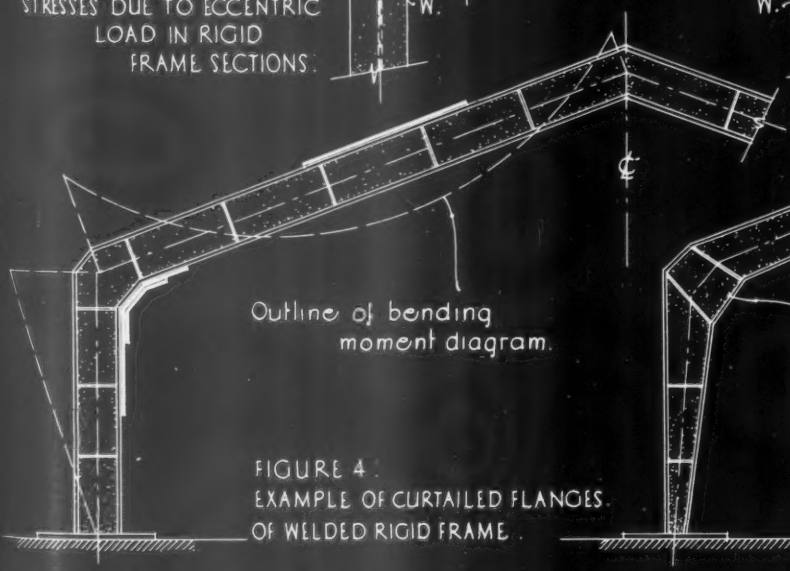


FIGURE 4 : EXAMPLE OF CURTAILED FLANGES OF WELDED RIGID FRAME.

FIGURE 5 : EXAMPLE OF WELDED RIGID FRAME OF VARIED DEPTH.

Issued by Braithwaite & Co., Engineers, Ltd. Compiled by Samuely & Hamann, Consulting Engineers.

INFORMATION SHEET : STEEL FRAME CONSTRUCTION, 6O : WELDING Nº 1G.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET
• 843 •
STRUCTURAL STEELWORK

Subject : Welding 16 : General Considerations and Principles of Design in Welded Steel : No. 6, Industrial Buildings and Large Single-storey Construction (3).

General :

This series of Sheets on welded steel construction is a continuation of a preceding group dealing with riveted and bolted construction, and is intended to serve a similar purpose, namely, to indicate the way in which economical design as affected by general planning considerations may be obtained.

Both the principles of design and the general and detailed application of welded steelwork, are analysed in relation to the normal structural requirements of buildings. The economies in cover and dead weight, resulting from lighter and smaller steel members and connections, are taken into consideration in the preliminary arrangement of the building components in order to obtain a maximum economy in the design of the steel framing.

This Sheet is the sixth of the section dealing with the general considerations and principles of design in welded steel, and illustrates rigid construction for industrial buildings and large single-storey structures. The principles of non-rigid construction are dealt with in the previous Sheet of this series.

Rigid Construction :

See also Figures Nos. 7 and 8 on Sheet 14 of the welding series. The application of frames is economical only if site welding is considered. Any construction consisting of columns, trusses and haunches is an exception to this rule as the haunches can be connected to the columns and trusses by means of bolting. Figure 1*a*.

The same effect as haunches can be obtained with a truss which retains a certain depth at the supports and has both upper and lower chords connected to the column. These connections can easily be bolted, as shown in Figure 1*b*, thus providing rigid construction without the use of projecting corners. This would be useful, for instance, for wall and roof construction of a building containing separate columns with crane girders (see Figure 7*a* on Sheet No. 15), or in other situations where maximum clearance is essential for the whole width of the building.

Sections and Loading :

As rigid frames have to transmit bending moments, which often produce greater stresses than the normal forces, the most economical sections are similar to those of beams (See also Sheet No. 12). Owing to the eccentricity of the stresses, unsymmetrical sections are preferable as shown in Figures 2*a*, *b*, *c* and *d*. This is explained by Figures 3*a*, *b* and *c*. Figure 3*a* shows the stress diagram for an eccentrically loaded symmetrical section. By arranging more material on the side of the greater stress, and less material on the opposite side (Figure 3*b*), the stresses become more equal, *i.e.*, the maximum stress becomes smaller, or by keeping the same maximum stress the area can be reduced.

Where the eccentricity is small, care must be taken to see that the assymmetry of the section is not exaggerated, otherwise a stress diagram like that shown in Figure 3*c* would result, where the stress is smaller on the side on which the load is applied.

Bending Moments :

As the bending moments generally vary considerably, for the sake of economy it is important to choose a section which has little material in the web and where the flanges can be greatly curtailed. Figure 4 gives an example of such curtailed flanges.

Instead of curtailing the flanges, the depth of the frame can be varied, and it is important to realize that the largest bending moments occur at the corners. See Figure 5.

Previous Sheets :

Previous Sheets of this series on structural steelwork are Nos. 729, 733, 736, 737, 741, 745, 751, 755, 759, 763, 765, 769, 770, 772, 773, 774, 775, 776, 777, 780, 783, 785, 789, 790, 793, 796, 798, 799, 800, 801, 802, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 816, 819, 821, 822, 823, 824, 826, 827, 829, 830, 832, 836, 837, 838, 839, 840 and 842.

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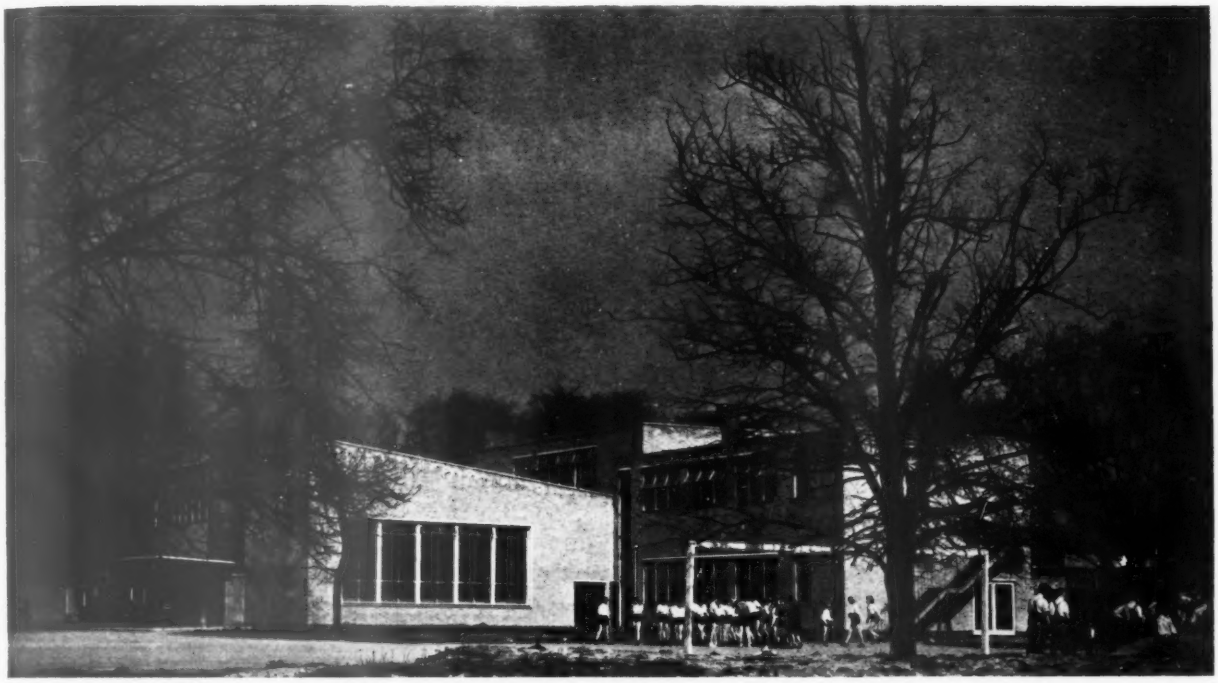
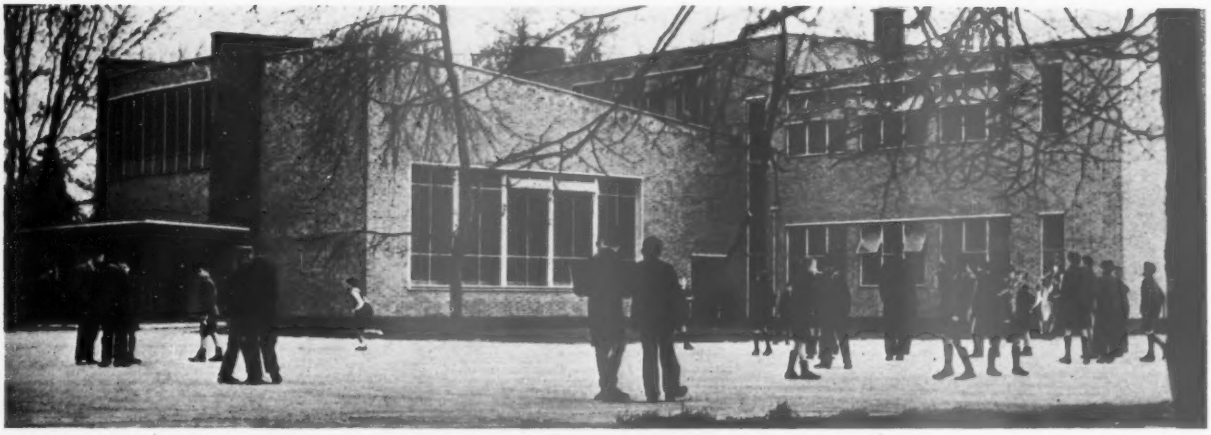


Impington at Work ; a typical scene. On the left the assembly hall with its canopied entrance and the two-storey block containing the workshop and the domestic science and art rooms. A girls' class in gym kit is seen assembling in the open.

IMPINGTON AT WORK

These pictures show how a modern building—Impington Village College—is seen by the public as contrasted with the way it is usually seen and photographed by the architect. To the public of Cambridgeshire, Impington is seen as a centre of social life with better facilities than in any other place in the country. The nearest competitors to Impington are the remaining three village colleges in the same county of Cambridgeshire. All these colleges have been built under



Buildings in use have a way of looking quite different to what they did when they were photographed for the ARCHITECTURAL REVIEW. Not worse, but different. Here is a view in the open court during a break.

Boys and girls do useful work on the allotments. An area of steadily growing extent is "ploughed up" and mixed vegetables are grown. These provide free-of-charge additions to the midday luncheons at the College. In the background is part of the classroom wing, with its glass walls.

The children having midday meal in the promenade. Toad-in-the-hole, potatoes (grown on the allotments), with jam roll and tea to follow. Price 3½d.

Mr. S. A. Ingle with his pupils in the woodworking class. They work in better light and on better benches than teachers in most other schools can show.

Dramatics form part of the curriculum. Children are the actors, and those not in the play form the critics—very severe critics, it may be added.

Domestic science is an important subject in the girls' curriculum. Here is a laundry class at work.

Another lesson in the laundry class. Right, the Library is open not only to the children but to adult readers as well.

Some of the Teaching Staff in the rest room. Right, children are taken home by motor bus. Impington Village College would never have been possible for the village of Impington by itself. Only because special bus services make it possible to organise the safe collection and delivery of the school children can so elaborate an institution be provided. The buses going north take the children to Milton, Landbeach, Waterbeach and Chittering; those travelling south stop at Histon, Girton, Dry Drayton, Madingley and Coton.

the Henry Morris administration and each one forms a community centre for the whole of the rural area it serves. Impington, designed by Walter Gropius and Maxwell Fry, is the most ambitious. In the senior school the classes, shown in the accompanying war-time photographs, accommodate 280 pupils of from 11 to 15 years of age. This is only a part of the work of the village college. There is its cultural and social appeal to the adult: the club, the branch of the county library, the assembly hall, with its modern stage and film equipment, the continuation classes, with their laboratories and workshops and the kitchen, from which lunches for the children and refreshments for adults are served. The buildings without their human population are republished on pages 237-238.

PRICES

SIXTH WARTIME LIST

EXPLANATORY NOTES

Few important changes have occurred since the last quarterly issue and prices generally can be considered fairly stable. Rates of Wages remain unchanged, and are as follows :—

	Craftsmen.	*Labourers.*
LONDON DISTRICT		
Within 12 miles radius	2s. 0d.	1s. 6¾d.
From 12-15 „ „	1s. 11½d.	1s. 6½d.

GRADE CLASSIFICATIONS

	A	A¹	A²	A³	B	B¹	B²	B³	C
Craftsmen..	1s. 10½d.	1s. 10d.	1s. 9½d.	1s. 9d.	1s. 8½d.	1s. 8d.	1s. 7½d.	1s. 7d.	1s. 6½d.
Labourers..	1s. 5¾d.	1s. 5¼d.	1s. 5d.	1s. 4½d.	1s. 4¼d.	1s. 3¾d.	1s. 3½d.	1s. 3d.	1s. 2¾d.

F. A. Davis.

F.S.I.

CURRENT MARKET PRICES OF MATERIALS

BY DAVIS AND BELFIELD, Chartered Quantity Surveyors

Prices vary according to quality and the quantity ordered.

Those given below are average market prices and include delivery in the London area, except where otherwise stated, but do not include overhead charges and profit for the General Contractor.

CONCRETOR

Cements

† All delivered in paper bags (20 to the ton) free and non-returnable.
* Paper bags charged at 6/– extra per ton non-returnable; jute sacks charged at 1/9 each and credited on return at 1/6.

	6 Tons and over	In 80-ton freights F.A.S. Safe Wharf in River Thames, London Area.
*Portland ... ... per ton	49/6	47/–
*"417" Ultra rapid hardening ... ... per ton	69/6	—
*Rapid hardening ... per ton	55/6	53/–
*Water repellent ... per ton	79/6	—
Atlas White (1 barrel 376 lbs.)		per barrel — 6 ton upwards
*Colorcrete rapid hardening, buff and red	per ton	79/6
*Colorcrete rapid hardening khaki ...	per ton	79/6
†Colorcrete rapid hardening dark ...	per ton	114/6 (4 ton lots)
†Colorcrete non-rapid hardening ...	per ton	from 175/– to 399/–
†Snowcrete	per ton	205/–

	1–9 cwts.	10–19 cwts.	1 ton and upwards
*Ciment Fondu, delivered Central London area ... ... per cwt.	15/3	14/9	12/9

Aggregate and Sands (Full Loads)

2" Unscreened ballast	per yard cube 9/–
¾"(Down) Washed, crushed and graded shingle	per yard cube 9/3
⅜" (Down) Ditto	per yard cube 10/3
2" Broken brick	per yard cube 12/6
¾" Ditto	per yard cube 14/–
Washed pan breeze	per yard cube 9/6
Coke breeze 1" to dust	per yard cube —
⅛" Sharp washed sand	per yard cube 13/3
White Silver Sand for white cement (one ton lots)	per ton 37/6

(For Sands for Bricklaying and Plastering *see* respective trades)

Pavings

Brick hardcore	per yard cube 4/6
Concrete ditto	per yard cube —
Clean furnace clinker and boiler ashes ...	per yard cube 4/6
Coarse gravel for paths	per yard cube 12/–
Fine ditto	per yard cube 15/6
Clean granite chippings	per ton 29/9

CONCRETOR—(*continued*)

Pavings—continued

Red quarry tiles, 6" × 6" × ⅞"	per yard super	7/2
Ditto 6" × 6" × ⅝"	per yard super	6/–
Buff ditto 6" × 6" × ⅞"	per yard super	7/10
Ditto 6" × 6" × ⅝"	per yard super	6/7
Hard red paving bricks, 2"	per 1,000	235/–
Ditto 1½"	per 1,000	190/–

Reinforcement

Home trade maximum basis price for mild steel rods, ⅜" diameter and upwards, ex mills delivered to station or siding ... ... per ton £16 19 6

Extras for :—

5/16" and ½" diameter...	per ton 10/–
7/16" diameter	per ton 15/–
⅜" diameter	per ton 20/–
5/16" diameter	per ton 30/–
¼" diameter	per ton 40/–
3/16" diameter	per ton 60/–
Lengths of 40 ft. to 45 ft.	per ton 10/–
Lengths of 45 ft. to 50 ft.	per ton 15/–

Sundries

Retarding liquid, in 5-gallon drums (for exposing aggregate)	per gallon 21/–	Ex Warehouse, Southwark Bridge. Drums chargeable and credited, if returned.
Ditto (for obtaining a bond)	per gallon 13/1½	

BRICKLAYER

Common Bricks

†Rough stocks	per 1,000 69/6
†Third stocks	per 1,000 67/–
†Mild stocks	per 1,000 74/6
Sand limes	per 1,000 67/6
‡Phorpres pressed Flettons	per 1,000 51/9
‡Phorpres keyed Flettons	per 1,000 53/9
Blue Staffordshire wirecuts	per 1,000 230/–
†Lingfield engineering wirecuts	per 1,000 80/–
Firebricks, best Stourbridge 2½"	per 1,000 —
Firebricks, best Stourbridge 3"	per 1,000 —

Facing and Engineering Bricks

Sand Limes, No. 1	per 1,000 95/–
Sand Limes, No. 2	per 1,000 80/–
‡Phorpres rustic Flettons	per 1,000 71/9

‡ At King's Cross. For delivery in W.C. district add 6/6 per 1,000.
† Price ex works, delivery extra.

BRICKLAYER—(*continued*)

Facing and Engineering Bricks—continued

Midhurst Whites	per 1,000	110/-
†Hard stocks, firsts	per 1,000	100/-
†Hard stocks, seconds	per 1,000	93/-
Sand-faced, hand-made reds	per 1,000 from	150/-
Sand-faced, machine-made reds	per 1,000 from	110/-
Red rubbers (9½-in.)	per 1,000	—
Uxbridge Flints (white)	per 1,000	80/-
Uxbridge Flints (creams, light greys, etc.) per 1,000	from	110/-
Dunbricks (concrete), multi reds, ex works	per 1,000	95/-
Dunbricks (concrete), multi lavender, buffs and golden brown, ex works	per 1,000	95/-
†Southwater engineering No. 1 (first quality red pressed)	per 1,000	125/-
†Southwater engineering No. 2 (second quality red pressed)	per 1,000	105/-
Blue pressed	per 1,000	250/-

† Price ex works, delivery extra.

Limes and Sand

		1-ton lots	6-ton lots
Lime, greystone	per ton	57/6	—
Lime, chalk	per ton	57/6	—
Lime, blue Lias (including paper bags)	per ton	67/-	—
Lime, hydrated (including paper bags)	per ton	67/-	—
Washed pit sand	per yard cube		11/6

(For cements, *see* "Concretor.")

Hire of jute sacks charged at 1/6 and credited at 1/6. If left, charged at 1/9.

Sundries

Wall ties, self coloured	per cwt.	—
Wall ties, galvanized	per cwt.	—
D.P.C. slates, size 18″ × 9″	per 100	38/-
D.P.C. slates, size 14″ × 9″	per 100	34/3
D.P.C. slates, size 14″ × 4½″	per 100	15/-
‡Ledkore D.P.C. Grade A	per foot super	6¾d.
‡Ledkore D.P.C. Grade B	per foot super	8¼d.
‡Ledkore D.P.C. Grade C	per foot super	10½d.

‡ Trade discount 5 per cent. and cash discount 5 per cent. Prices include delivery on minimum of £5 orders.

		9″×3″	9″×6″	9″×9″	12″×9″	14″×9″
Earthenware airbricks: Red, blue, vitrified and buff terra cotta	each	-/11	1/10	3/4	—	—

		9″×3″	9″×6″	9″×9″	12″×6″	12″×9″
Black cast iron, School Board pattern airbricks	per doz.	3/9	7/7	15/1	15/1	—
Galvanized ditto	per doz.	7/7	15/1¼	30/2½	30/2½	—
Black hit and miss cast iron ventilators	per doz.	18/-	27/6	37/1	37/1	—
Galvanized ditto	per doz.	36/-	57/2	74/3	74/3	—

		1′ 0″	1′ 6″	2′ 0″	2′ 6″	3′ 6″	5′ 0″
Buff terra cotta chimney pots	each	3/3	3/11	5/8	7/6	17/6	29/3
Fireclay	per ton	—					

Wall reinforcement supplied in standard rolls containing 25 yards lin.

*2″ wide black japanned	per roll	2/5
*2″ wide galvanized	per roll	—
*2½″ wide black japanned	per roll	3/-
*2½″ wide galvanized	per roll	—

Greater widths pro rata 2¼″ price carriage paid on orders of £5. Discounts for quantities.

* Prices subject to 5% advance.

Partitions

		2″	2½″	3″	4″
Breeze	per yard super	2/2	2/7	3/2	3/10
Clay tiles	per yard super	2/8	2/11	3/6	3/10
Pumice	per yard super	3/6	4/3	5/-	5/6
Plaster	per yard super	3/1	3/11	5/-	5/9

Gas Flue Blocks

		Single Flues	Double Flues
Straight blocks	each	1/3	2/2
Building in set	per set of 3	2/11	5/4
Cover blocks	each	1/7	3/4
Raking blocks 45°	each	3/-	4/3
Raking blocks 60°	each	2/2	3/1
Offset blocks	each	3/8	5/4
Closer blocks	each	1/3	2/2
Closer flashing blocks	each	1/1	1/10
Straight flashing blocks	each	1/1	1/10
Terminal and cap	per set	7/5	12/8
Middle terminal and cap	per set	6/11	11/10
End terminal and cap	per set	7/2	12/5
Corbel block	each	5/4	3/6
Gathering block	each	—	10/8

DRAINLAYER

Agricultural Pipes

		2″	3″	4″	6″
Pipes in 12″ lengths (Delivered in full loads Central London Area.)	per 1,000	72/6	102/6	140/-	250/-

Salt Glazed Stoneware Pipes and Fittings

		4″	6″	9″
Pipes (2′ lengths)	each	1/8	2/6	4/6
Bends, ordinary	each	2/6	3/9	6/9
Single Junction, 2′ long	each	3/4	5/-	9/-
Yard Gulley, without grating	each	6/3	6/10½	11/3
Ordinary round or square Grating, painted	each	-/7½	1/3	2/6
Ordinary round or square Grating, galvanized	each	1/0½	2/1	4/4½
Extra for Inlets, horizontal	each	1/6	1/6	1/6
Extra for Inlets, vertical	each	2/3	2/3	2/3
Intercepting Trap with Stanford Stopper	each	17/6	22/6	37/6
Grease and mud interceptor with bucket for removing silt and grease for 6″, 9″ and 12″ drains, with iron grating, painted	each	20/-		
Ditto, with iron grating galvanized	each	21/10½		

The above prices to be varied by the following percentages for the different qualities given. All subject to 2½ per cent. cash discount.

	British Standard	British Standard Tested
Orders for 2 tons and over	Less 5%	Plus 20%
Orders under 2 tons, 100 pieces upwards	Plus 12½%	Plus 37½%
Orders under 2 tons, less than 100 pieces	Plus 22½%	Plus 47½%

	Best	Seconds
Orders for 2 tons and over	Less 12½%	Subject to 15% off the price of best quality for all sizes
Orders under 2 tons, 100 pieces upwards	Plus 5%	
Orders under 2 tons, less than 100 pieces	Plus 15%	

Cast Iron Drain Pipes and Fittings

Socket and Spigot Pipes :—

Weight (per 9 ft.)	Size	9 fts.	6 fts.	4 fts. each	3 fts. each
1 . 1 . 8	4″ per yard	7/7	8/5	13/1	10/-
1 . 1 . 20	4″ per yard	7/11	8/7	13/4	10/4
2 . 0 . 6	6″ per yard	11/5	13/5	21/5	17/2
4 . 0 . 2	9″ per yard	21/-	26/9	45/6	35/-

		2 fts.	18 ins.	12 ins.	9 ins.
1 . 1 . 8	4″ each	8/2	6/11	6/1	5/7
1 . 1 . 20	4″ each	8/3	—	—	—
2 . 0 . 6	6″ each	12/10	—	—	—
4 . 0 . 2	9″ each	—	—	—	—

Tonnage Allowances :—
Orders up to 2 tons nett.
Orders 2 to 4 tons less 2½%
Orders 4 tons or over less 5%

		4″	6″	9″
Bends	each	7/1	14/8	45/2
Single junctions	each	12/5	25/5	78/-
Intercepting traps	each	33/10	56/6	139/-
Gulleys ordinary trapped	each	16/5	—	—
Extra for inlet 4″	each	4/3	—	—
Grease Gulley trap	each	128/7	—	—
H.M.O.W. large socket gulley trap with 9″ gulley top and heavy grating and one back inlet	each	29/9	52/6	—

Channels in Brown Glazed Ware

		4″	6″	9″
Half round straight channels 24″ long	each	1/3	1/10½	3/4½
Half round straight channels 30″ long	each	—	—	4/2¾
Ditto, short lengths	each	1/3	1/10½	—
Half round ordinary channel bends	each	1/10½	2/9¾	5/0¾
Ditto, short	each	1/10½	2/9¾	—
Ditto, long	each	3/9	5/7½	10/1½
Three-quarter round branch bends	each	5/-	7/6	—

		6″×4″	9″×6″
Half round taper channels 24″ long	each	3/9	6/9
Half round taper channel bends	each	4/8½	8/5½

The above prices are subject to the same discounts as those given for "Best" quality salt glazed stoneware pipes.

Manhole Covers, etc.

	Black	Galvanized
24″ × 18″ single seal for foot traffic. (Weight 0.0.3 in lots of 24) each	14/3	28/6
24″ × 18″ single seal for light car traffic. (Weight 2 cwts. in lots of 24) each	40/6	81/-
24″ × 18″ Wood Block pattern. For road traffic. (Weight 3 cwts.) each	Coated 67/6	

DRAINLAYER—(*continued*)

Manhole Covers, etc.—(continued)

	Fine Cast	Galv.
Cast iron steps, 13½″ long, 6″ wide, 9″ in wall, approximate weight 5½ lbs. each per dozen	14/9	25/6
Galvanized fresh air inlets with cast brass fronts (L.C.C. pattern) ... ... each	6/9	26/6

MASON

Yorkstone

Building quality Robin Hood and Woodkirk Blue Stone.	
Blocks scrappled, random sizes... ... per foot cube	5/2
Add for blocks to dimension sizes ... per foot cube	7d. (each dimension)
Templates with sawn beds, edges rough (up to 4 ft. super and not over 2′ 6″ long) ... per foot cube	5/9
Templates with sawn beds, sawn one edge, per foot cube	6/11
Templates with sawn beds, sawn two edges, per foot cube	8/0¾
Prices f.o.r. Yorkshire, railway rate to London Station per ton. (Minimum 6-ton loads.)	29/1

Artificial Stone

6″ × 3″ Copings and sills ... ... per foot run	1/10
6″ × 6″ Copings and sills ... ... per foot run	2/10
9″ × 3″ Copings and sills ... ... per foot run	2/2½
9″ × 6″ Copings and sills ... ... per foot run	4/0½
12″ × 3″ Copings and sills ... ... per foot run	2/10
12″ × 6″ Copings and sills ... ... per foot run	4/7
Cornices according to detail, per foot cube (from)	8/3

SLATER, TILER AND ROOFER

Best Bangor Slates

	£ s. d.
24″ × 12″ ... ... per 1,000 actual	58 0 0
20″ × 10″ ... ... per 1,000 actual	38 0 0

Prices include for delivery to site in lots of 1,000 and upwards.

Tiles

	£ s. d.
Hand-made sandfaced 10½″ × 6½″ red roofing tiles per 1,000	7 10 0
Machine-made sandfaced 10½″ × 6½″ red roofing tiles per 1,000	6 10 0
Berkshire rustic pantiles... ... ... per 1,000	30 0 0

Asbestos-cement

†6″ corrugated sheets, grey	per yard super	3/0¾
†Standard 3″ corrugated sheets, grey ...	per yard super	2/9½
Slates (*Manufacture temporarily suspended*) :—		
* 15¾″ × 7⅞″ grey	per 1,000	£6 15 9
* 15¾″ × 15¾″ diagonal, grey ...	per 1,000	£13 11 6
* 15¾″ × 15¾″ diagonal, russet or brindled	per 1,000	£21 19 6
Pantiles (*Manufacture temporarily suspended*).		
* Large russet brown	per 1,000	—

* Prices are for minimum two-ton loads, and are subject to 6¼% advance and 5% trade discount.

† Do., but 3¾% advance and 5% trade discount.

JOINER

Asbestos-cement and Asbestos Products

5/32″ Semi-compressed flat building sheets, grey per yard super	1/3½
3/16″ Ditto ... ... per yard super	1/4
¼″ Ditto ... ... per yard super	1/11

Prices are for orders of two tons and over and are subject to 10% advance and 5% trade discount.

¼″ Asbestos wallboard (in sheets 8′ 0″ × 4′ 0″, 10′ 0″ × 4′ 0″ and 12′ 0″ × 4′ 0″) ... per foot super	–/4⅝
3/16″ Ditto ... ... per foot super	–/3¾
3/16″ Asbestos wood (in sheets 8′ 0″ × 4′ 0″) per yard super	2/4

The following asbestos prices are subject to 10 per cent. trade discount :—

Asbestos-cement stipple glazed sheets (in sheets 8′ 0″ × 4′ 0″ and 4′ 0″ × 4′ 0″) ... per yard super	8/–
Ditto, plain white glazed sheets (in sheets 8′ 0″ × 4′ 0″ and 4′ 0″ × 4′ 0″) per yard super	9/6
Marble glazed sheets (in sheets 8′ 0″ × 4′ 0″ and 4′ 0″ × 4′ 0″) ... per yard super	8/–
½″ Fibre Board ... ... per foot super	–/8½

	25–75 yards	150–300 yards	Over 600 yards
⅜″ Fireproof plaster board per yard super	2/5	2/1	1/9
½″ Ditto ... ... per yard super	2/3	1/11	1/7
Joint tape (approx. 250 feet run) per roll	—	—	1/6
Joint filler ... ... per lb.	—	—	–/4

Sundries

Slaters or sarking felt ... ... per yard run	—
Roofing felt ... ... per yard run	—
Bituminous hair felt ... ... per roll	—

All rolls 25 yards long by 32″ wide.

JOINER—(*continued*)

Sundries—(continued)

Black waterproof paper, 5′ wide ... ... per yard run	–/7
Building paper in rolls of 100 yards, 1-ply, 60″ wide (B.I. 120) ... ... per yard run	1/2½
"Cabots" Quilt :—(Ex Works) Twenty roll lots delivered carr. free.	
Double ply ... ... per roll 47/6	per half-roll 27/–

All rolls 28 yards long by 36″ wide. Special terms for quantities.

Cut steel clasp nails	1″	per cwt. 40/6	4″	per cwt.	31/–
,, ,, floor brads	2″	,, 31/–	3″	,,	29/1
Bright oval wire nails	1″	,, 45/10	4″	,,	33/1

Galvanized wire staples with slice cut points ... ... 1″ × 12 gauge per cwt.	—
Scotch glue ... ... per cwt.	—

STEEL AND IRONWORKER

Steelwork

	£ s. d.
Basis price for rolled steel joists sections 5″ × 3″ to 16″ × 6″, in 10 ft. to 50 ft. lengths per ton	15 10 6

PLASTERER

Plaster and Cement

	1-ton loads
Sirapite (coarse) ... ... per ton	88/6
,, (fine) ... ... per ton	87/6
Victorite No. 1 ... ... per ton	110/–
,, No. 2 or non-sweat per ton	105/–
Thistle (browning) ... per ton	88/6
Thistle (haired) ... ... per ton	—
Pink plaster ... ... per ton	83/6
White plaster ... ... per ton	93/–
Keene's pink ... ... per ton	138/–
Keene's white ... ... per ton	—
Super Carbo ... ... per ton	—
Carbo-setting ... ... per ton	—

	1 ton upwards £ s. d.
Cullamix No. 2 cream (rendering mixture) per ton from	7 3 6
,, ,, No. 3 cream ,, ,, per ton from	7 3 6
Snowcrete mixture ,, ,, per ton from	6 18 6

Sundries

Sharp washed sand ... ... per yard cube	13/3
Cow hair ... ... per cwt.	42/–
Goat's hair ... ... per cwt.	66/–
Expanded metal lathing, 9′ 0″ × 2′ 0″ ⅜″ mesh × 26 gauge ... ... per sheet	2/9
Wire Slate nails (galvanized) 1¼″ × 15 gauge per cwt.	67/7
,, ,, ,, (bright wire) ,, ,, per cwt.	—

	Less than 150 yds.	Less than 300 yds.	Over 300 yds.	Over 600 yds.
⅜″ Plaster board per yard super	—	—	—	—
1¼″ Galvanized nails ... per cwt.	—			
Scrim cloth in 100-yard rolls per roll	—			

Wall Tiles

The following prices are subject to 50 per cent. addition :

Commercial quality.	
Ivory, white, etc., glazed 6″ × 6″ × ⅜″ ... per yard super	10/1
Angle beads (1½″ wide) ... ... per yard run	1/2¾
,, ,, (1″ ,,) ... ... per yard run	–/10
Rounded edge tiles ... ... per yard run	2/6½
Coloured enamelled bright glazed, 6″ × 6″ × ⅜″ ... ... per yard super	14/3
Angle beads (1½″ wide) ... ... per yard run	1/4¾
,, ,, (1″ ,,) ... ... per yard run	–/11¼
Rounded edge tiles ... ... per yard run	2/7
Eggshell gloss enamelled, 6″ × 6″ × ⅜″ ... per yard super	15/–
Angle beads (1½″ wide) ... ... per yard run	1/7¼
,, ,, (1″ ,,) ... ... per yard run	1/0¾
Rounded edge tiles ... ... per yard run	2/8¼
Special rates for quantities	

PLUMBER

Lead

3½ lbs. and upwards milled sheet lead in quantities of 5 cwts. and upwards ... ... per cwt.	35/6
Add if cut to sizes ... ... per cwt.	3/–
Lead ternary alloy, No. 2 quality extra over sheet lead ... ... per cwt.	7/–
Allowance for old lead delivered to merchant per cwt.	18/–

PLUMBER—(*continued*)

Cast Iron Goods

	Percentage Adjustment on List No. 3100 A.B, 1/2/40
Rainwater Goods (painted or unpainted) ...	*Plus* 7½%
Soil goods (coated or uncoated)	*Plus* 7½%

Mild Steel Rainwater Goods

The following prices are subject to 2½ per cent. trade discount and 22½ per cent. advance.

24 gauge rainwater slip jointed pipes.

	2″	2½″	3″	3½″	4″
Galvanized round pipes with ears ... ... per 6′ 0″	2/7½	3/1½	3/9	4/3	4/9
Painted round pipes with ears per 6′ 0″	2/4½	2/9	3/1½	3/7½	4/-
Painted or galvanized short lengths with ears, extra each	-/6	-/6	-/6	-/6	-/6

18 Gauge gutters.	3″	3½″	4″	4½″	5″	6″
Galvanized half round gutters per 6′ 0″	2/-	2/3	2/4½	2/9	3/-	3/7½
Painted half round gutters ... per 6′ 0″	1/6	1/9	2/-	2/3	2/6	3/-
Painted or galvanized short lengths extra each	-/3	-/3	-/3	-/3	-/3	-/3

Asbestos-Cement Rainwater Goods

The following prices are subject to 15 per cent. advance and 12½ per cent. trade discount.

Orders over £30 are subject to 17½ per cent. trade discount.

Rainwater pipes.

Prices are for 6′ 0″ lengths, and 10′ 0″ lengths in 2″, 2½″ and 3″ diameters. Short lengths up to 2′ 0″ are charged as one yard. From 2′ 0″ to 4′ 0″ charged as 1½ yards. From 4′ 0″ to 6′ 0″ charged as 2 yards. Over 6′ 0″ charged as 10′ 0″.

Round pipes.

2″	per yard run	1/10
2½″	per yard run	2/0¾
3″	per yard run	2/5¾
3½″	per yard run	2/11¼
4″	per yard run	3/4¾
4½″	per yard run	4/10¼
5″	per yard run	5/9½
6″	per yard run	7/1¾

Gutters.

Short lengths of gutter up to 2′ 0″ charged as 1 yard; from 2′ 0″ to 4′ 0″ as 1½ yards, and over 4′ 0″ as 2 yards.

	3″	4″	4½″	5″	6″	8″
Half round gutters per yard run	1/3¾	1/6¾	1/7¾	1/11	2/8	3/3½
Ogee gutters per yard run	—	1/11	2/0¾	2/5¾	3/0¼	3/11¼

INTERNAL PLUMBER

Lead pipe in coils, 5 cwts. and upwards ...	per cwt.	35/-
Lead soil pipe	per cwt.	38/-
Add if ribbon marked	per cwt.	-/3
Lead ternary alloy, No. 2 quality extra over lead pipe	per cwt.	7/-
Plumber's solder	per cwt.	136/-
Tinman's solder	per cwt.	191/-

Drawn lead traps with brass screw eye, 6 lbs.

		1″	1¼″	1½″	2″
S. trap	each	2/3	2/8	3/4	4/9
P. trap	each	2/-	2/2	2/3	3/2
Extra for 3″ deep seal ...	each	-/6	-/6	-/6	-/6

Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc.

Tubes.

Tubes 2 ft. long and over		¼″	⅜″	½″	¾″	1″	1¼″	1½″	2″
	per ft.	-/5½	-/6¾	-/9¼	1/1	1/4½			
Pieces 12″ to 23½″ long	each	1/1	1/5	1/11	2/8	3/4	4/9		
Bends	each	-/11	1/2	1/7½	2/7½	3/2	5/2		
Fittings.									
Elbows, square ...	each	1/1	1/3	1/6	2/2	2/7	4/3		
Elbows, round ...	each	1/2	1/5	1/8	2/4	2/10	4/8		
Tees	each	1/3	1/7	1/10	2/6	3/1	5/1		
Crosses	each	2/9	3/3	4/1	5/6	6/7	10/6		
Sockets, plain ...	each	-/4	-/5	-/6	-/8	-/10½	1/3		
Sockets, diminished	each	-/6	-/7	-/9	1/-	1/4	2/-		
Flanges	each	1/-	1/2	1/4	1/9	2/-	2/9		
Caps	each	-/5	-/6	-/8	1/-	1/3	2/-		
Plugs	each	-/4	-/5	-/6	-/8	-/10	1/3		

INTERNAL PLUMBER—(*continued*)

Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc. (continued)

Fittings and flanges and tubes ordered in long random lengths are subject to the following trade discounts:—

	Tubes	Fittings	Flanges
"Light Weight" ...	51⅛%	47¼%	43⅛%
"Heavy Weight" ...	44%	39¾%	33⅛%

COPPERSMITH AND ZINC WORKER

Copper

Hot rolled copper sheeting in 1 cwt. lots, all gauges to 24 wire gauge	per lb.	-/11¼
Light gauge copper tube, solid drawn	per lb.	1/3
Copper tube, solid drawn screwing sizes ...	per lb.	1/2½
Copper wire, 10 and 12 gauge	per lb.	1/1
Copper nails, 1″ and up	per lb.	1/1½

GLAZIER

Sheet Glass cut to size (ordinary glazing quality)

		In squares not exceeding 2 ft.	4 ft.	6 ft.	Over 6 ft.
18 oz. clear sheet ...	per foot super	—	-/3¼	-/3⅝	-/3⅞
24 oz. ditto ...	per foot super	—	-/4½	-/4¾	-/5¼
32 oz. ditto ...	per foot super	—	-/6⅞	-/8	-/9
Obscured sheet glass net extra ...		—	-/3	-/3	-/3
⅛″ figured rolled glass, white and cathedral	per foot super	-/7½			
⅛″ ditto, normal tints	per foot super	-/10½			

British or Foreign Polished Plate Glass cut to size

Ordinary ¼″ Substance		Glazing for Glazing Purposes	Selected Glazing Quality	Silvering Quality
In Plates not exceeding				
1 ft. super ...	per foot super	—	—	—
2 ,, ...	per foot super	1/8	1/11	2/3
3 ,, ...	per foot super	2/3	2/7	3/1
4 ,, ...	per foot super	—	—	—
6 ,, ...	per foot super	3/2	3/5	3/11
12 ,, ...	per foot super	—	—	—
45 ,, ...	per foot super	3/6	4/-	4/11
65 ,, ...	per foot super	—	—	—
90 ,, ...	per foot super	—	—	—
100 ,, ...	per foot super	4/2	5/7	6/-

Plates exceeding 100 ft. super or 160 in. long or 100 in. wide at higher prices.

Special quotations should be obtained for other qualities and thicker substances.

Wired Glass Cut to Sizes

¼″ Rolled or rough cast	per ft. super 10½d.
‡¼-in. Georgian rough cast	per ft. super 11d.

	In squares not exceeding 1 ft.	2 ft.	3 ft.	4 ft.
‡¼-in. Georgian polished plate per ft. super	2/6	2/8	2/10	3/2
	8 ft.	12 ft.	20 ft.	30 ft
‡¼-in. Georgian polished plate per ft. super	3/8	3/10	4/2	4/6

Supplied in sizes up to 110 in. long and up to 36 in. wide.

‡ For cutting to allow for wires in adjacent pieces to be "lined up," add 4d. per foot super.

PAINTER

White ceiling distemper	per cwt.	14/-
Washable distemper	per cwt.	60/-
Petrifying liquid	per gallon	—
Ready mixed white lead paint (best) 5-cwt. lots, in 14 lb. tins	per cwt.	83/6
White enamel	per gallon	27/6
Stiff white lead, genuine English stack process, 1-ton lots, in 1-cwt. kegs ...	per cwt.	61/9
Driers	per cwt.	42/-
Linseed oil raw (5-gallon drums)	per gallon	—
,, boiled ,, ,, ...	per gallon	—
French polish	per gallon	12/6
Knotting	per gallon	16/-
Oil stain...	per gallon	12/-
Varnish, oak	per gallon	12/6
,, copal	per gallon	17/6
Varnish, flat	per gallon	22/6
Turpentine, genuine American, 5-gallon lots	per gallon	4/-
Creosote, 1-gallon lots...	per gallon	1/9
Putty	per cwt.	22/9
Size	per firkin	4/6
Best quality English gold leaf, 23 carat ...	per book	3/-
Extra thick, ditto	per book	4/-

R.I.B.A. NEW MEMBERS.

The following members have been elected.

Fellows.

Cope, G. A., M.C. (Leicester).
Mellor, F. (Middlesbrough).
Ormrod, F. J. M. (Liverpool).
Heaps, S. A. (London).

Associates.

Allnutt, G. T. (The Polytechnic, Regent Street, London) (London).
Marks, G. H. B. (Architectural Association) (London).
Newton, F. C. (Architectural Association) (London).
Todd, A. S. (Coatbridge, Lanarkshire).

(Overseas).

Mistri, M. P. (Bombay).
Patell, K. A. (Bombay).
Shastri, J. D., G.D.ARCH., A.I.I.A. (New Delhi).

Licentiates.

Barkin, S. C., B.SC. (Wembley, Middlesex).
Barton, S. H. (London).
Brown, A. W. H., F.S.I., M.T.P.I. (London).
Clark, W. (London).
Duffell, Miss M. V. (London).
Duke, W. E. (London).
Fazackerley, D. (Preston).
Freeborn, Major J. H. R. (Stromness, Orkney).
Garlick, A. (London).
Griffiths, S. A. (Stourbridge).
Hastings, A. E. J. (London).
Hood, J. G. (London).
Leach, C. A. (Rochester, Kent).
Mortimer, L. (Bournemouth).
Niven, A. (Harrow, Middlesex).
Price, T. L. (London).
Robinson, C. S. (London).
Rule, F. A. (London).
Simpson, A. F. (London).
Southgate, F. J., F.S.I. (London).
Stokes, H. N. (Birmingham).
Taylor, R. A. (London).

WOMEN ARCHITECTS AND RECONSTRUCTION

In the House of Commons last week Mr. Rostron Duckworth asked the Chancellor of the Exchequer whether, in view of the latitude given to the War Damage Commission to readjust the plans for reconstructing destroyed buildings, he could state how, in reaching such decisions, the views of women, and especially women architects, were obtained.

Sir Kingsley Wood said he was informed by the War Damage Commission that no occasion had as yet arisen for obtaining the views of women in general or of women architects in particular in relation to its decisions. When the Commission found it necessary to impose conditions on reconstruction, the deciding factor would be the public interest, as defined in Section 7 of the War Damage Act and Treasury directions thereunder.

THE RECONSTRUCTION OF BRISTOL

At the last meeting of the Housing Centre the City Architect of Bristol (Mr. J. Nelson Meredith, F.R.I.B.A.) was to have opened a discussion on the reconstruction of his city. Being unable to be present his paper was read by the Chairman, Colonel Lafontaine, O.B.E.

Mr. Meredith said that the geographical position and features of Bristol, and its contour, might be the basis of making the city one of the finest in the country. He visualized interesting architectural vistas, not strings of stereotyped buildings but avenues of structures each with its own individuality, blending harmoniously in the colour of the material used : a new and noble city of which the main beauties and chief characteristics would be maintained. When the day of development dawned he trusted that tradition and local material would be borne in mind. It should be a place of good social life and, what was even more important, of healthy and happy individual life.

REMOVAL OF RAILINGS FROM BUCKINGHAM PALACE

H.M. the King has approved the removal from Buckingham Palace of certain sections of railings and gates as a contribution towards the national campaign for the collection of iron gates and railings to be converted into scrap for the manufacture of tanks and other war weapons. About 20 tons of metal will be removed.

Iron gates and railings from undamaged buildings are expected by the Ministry of Works to yield half a million tons of scrap iron. Instructions have been issued to local authorities throughout the country to list all unnecessary railings in their district. Six weeks is allowed for the completion of these schedules, but it is hoped that substantial quantities of scrap metal will be available at once.

The urgency of the demand for scrap is increased by the fact that shipments from the United States have ceased for the moment, by mutual agreement. The public is therefore called upon to sacrifice its railings—and this term includes iron and steel posts, chains, bollards, gates, stiles and similar materials.

As soon as the lists have been completed by local authorities the scrap will be removed area by area, in such a way that the most economical use is made of labour and transport.

Only three reasons will save railings from being removed : public safety, unusual, historic or artistic merit, and the confining of cattle. Owners who consider their railings come under these heads should lodge an appeal against their removal within 14 days of public notice being given of the intention to conduct the survey. Railings in dispute will not be removed until the appeal has been heard.

The railings round churches and cemeteries are not exempt from the order which gives the Ministry of Works power to remove the railings—Defence General Regulations, 1939, Regulation 50. A recent Order in Council (S.R.O. 1153), however, absolves tenants from all obligation to landlords for railings in their charge.

Already hundreds of tons of railings have been removed from Government Buildings, including the H.Q. building of the Ministry of Works, and 1,200 tons have been taken from the Royal Parks.

Owners are asked to donate their railings, but those unable to do so will be paid compensation at a standard rate of 25/- per ton.