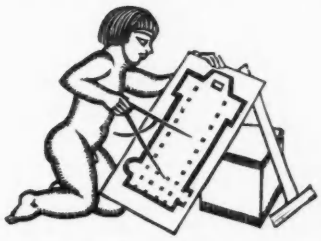
THE ARCHITECTS' JOURNAL



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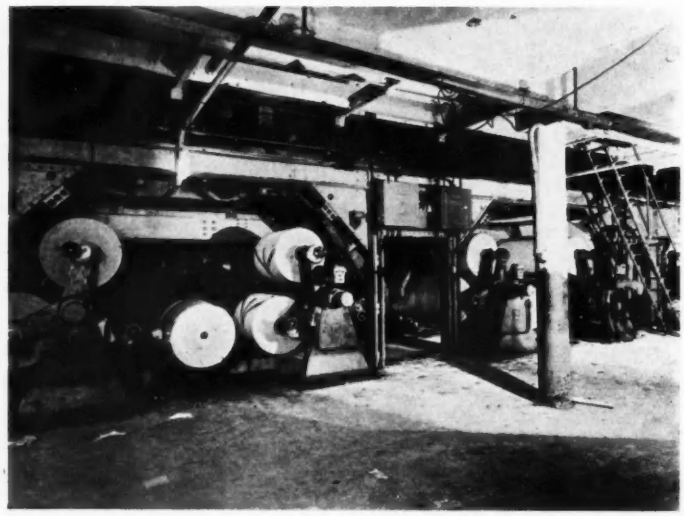
CHRISTIAN BARMAN, *Editor*

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.

WEDNESDAY, APRIL 20, 1927 NUMBER 1683: VOLUME 65

PRINCIPAL CONTENTS

Five miles of paper on a reel—three reels to a "reel magazine"—42 "reel magazines"—126 reels—630 miles of paper! In the sub-basement in Northcliffe House, the new home of the "Daily Mail," 126 reels of paper are in use or in reserve on the machines every day. Each of the 42 "reel magazines" must be ready to feed its 15 miles of paper up through the floor to the printing presses. The new presses in Northcliffe House have a total printing capacity of 756,000 copies of the "Daily Mail" per hour. A reel of paper for the "Daily Mail" is of no light weight. An illustration on this page shows one of the "Daily Mail" reels being trucked into position in Northcliffe House. Another shows a corner of the reel-line and a glimpse of some of the 126 reels, which hold the 630 miles of paper. The concrete surfaces in the basement and sub-basement for Northcliffe House were specified by Messrs. Herbert O. Ellis & Clarke, FF.R.I.B.A., the architects, to be hardened with "Colemanoid." The heavy reels of paper on the steel-wheeled trucks must pass daily over these floors. Few floors are called upon to be so resistant to wear and tear as floors in a printing house. Resistance to oil and grease is another necessary attribute, if "newspaper production floors" are to be a success. "Colemanoid" makes floors oil and grease proof. Specifications for similar floor toppings can be had from me at Regent House, Regent St., London, W.1.

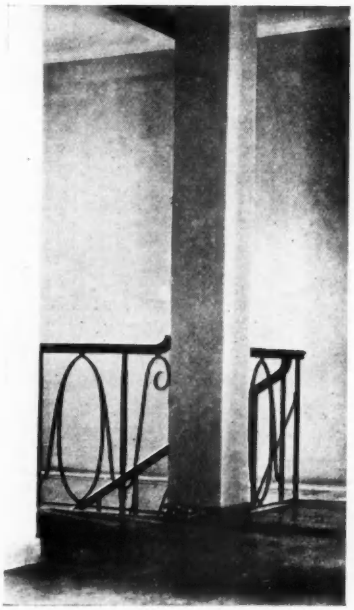


Frederic Coleman

[A working detail of this staircase appears on the following page]

THE STAIRCASE AT THE GOLF HOUSE, PRESTATYN, NORTH WALES

[BY EASTON AND ROBERTSON]



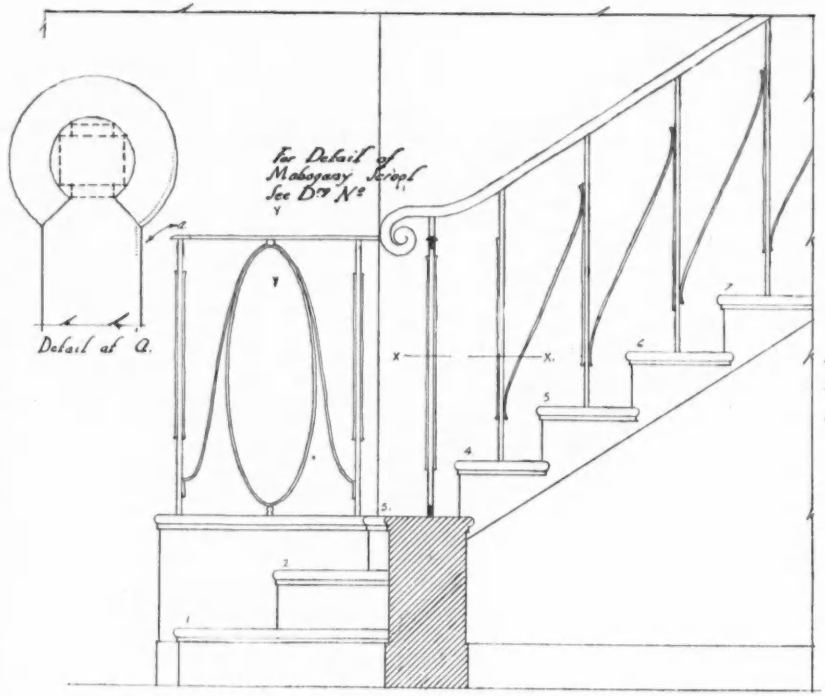
THE WEEK'S DETAIL

[BY EASTON AND ROBERTSON]

The staircase leads from the entrance hall to the principal floor; it is built of reconstructed Portland stone. An extremely interesting treatment has been hand-forged and has a rough surface, and instead of being painted it was heated and dipped in oil; this produces a hard rust of a deep brown colour, which is fixed by varnishing. The handrail is of walnut to match the doors.

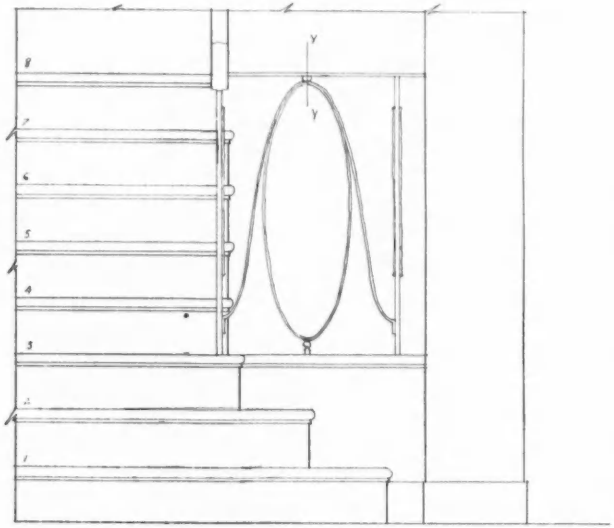
Residential Golf Club - Presbyn - -
Eighth full Size and full Size Details of
Wrought Ironwork on Main Staircase -
Drawings to be referred to :- Nos 51 and 18

Drawing No 54

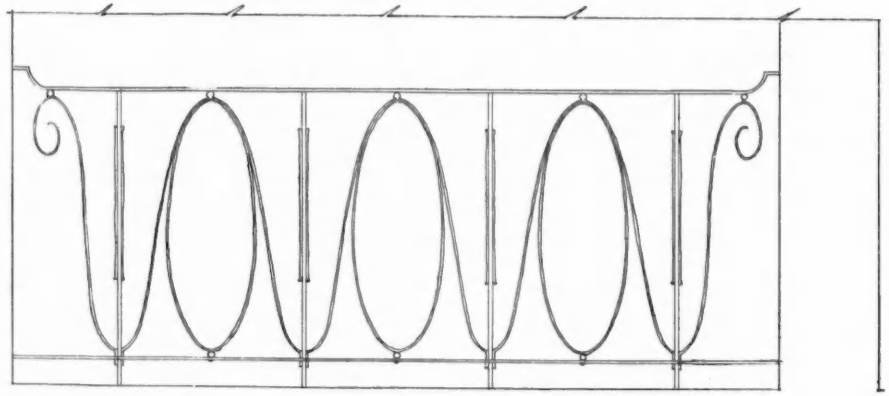


Elevation A.B.

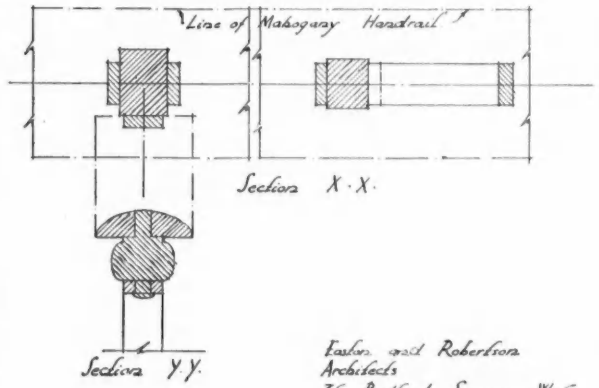
Note -
The Lettering of
Elevations is
taken from Dtg
No 51 - -



Half Elevation C.D.



Panel at Top of Staircase. See Dtg No 18.



Easton and Robertson
Architects
36, Bedford Square W.C.1

October 1925.

A photograph of this detail is given on the preceding page.

THE ARCHITECTS' JOURNAL

Wednesday, April 20, 1927

SKETCH-PLANS AND ESTIMATES

THERE are probably almost as many ways of making sketch-plans as there are architects to make them, and the value of sketch-plans when made must obviously vary with their degree of technical and artistic elaboration and the precision of their solution of the problems for which they have been evolved. In the case of plans for schemes which never reach the stage of actual bricks and mortar, it is sometimes assumed by the disheartened client that their value is simply nothing at all, and lawyers are enriched in the course of the ensuing disputes.

But, while a jaundiced eye may view the custom of charging a percentage upon the estimated cost of the work as likely to encourage the manufacture of hasty and ill-considered plans, it is really doubtful whether any fairer method of assessing the value of purely technical documents is likely to be devised. It would be difficult to imagine any rogue of an architect growing rich by purposely producing indifferent plans at great speed and charging for them at the highest possible rate. He would be unlikely to play this nefarious game twice.

But the rate of pay for sketch-plans raises a question of general policy which must be answered in the interests of the profession as a whole.

Are the architects who charge for sketch-plans at Institute rates likely to frighten prospective clients and drive them into the hands of the builder who, although untrained in the art of architectural design, advertises the fact that he gives "plans and estimates free"? And, if so, should the Institute reduce the scale of charges for sketch-plans in order to avoid this (possible) stampede of (possible) clients? The answers to these two questions must depend upon the definition of the term "sketch-plan."

If a sketch-plan is a considered scheme developed up to the point at which it is practicable to obtain a just idea of the probable cost of the building, the present scale of charges published by the R.I.B.A. is not unduly hard upon the client or over-generous to the architect. And this standard of development of the sketch-plan is undoubtedly desirable in the best interests of architecture and, in the end, of architects, who deserve well in proportion as they produce thoughtful and well co-ordinated work.

The question of cost is vital, and a sketch-plan for which payment is demanded in accordance with the present R.I.B.A. scale should represent, with as near an approach to accuracy as the fluctuations of market prices allow, the type of building that can be executed for the sum that the client is prepared to spend. It is part of the architect's business to know how to design to a limitation of cost, and the conscientious designer prides himself upon his skill in producing a design embodying as nearly as possible his client's requirements at the proposed expenditure.

This operation of cramming accommodation into a limited space is costly in the architect s time and thought, and payment for the sketch-plans and estimates at a high rate is justified where it has been satisfactorily performed. Where it has not been seriously attempted, and the tender for the execution of the design exceeds the architect's estimate by a large margin, the value of the sketch-plan is reduced to the level of a student's academic design which may, or may not, be intrinsically precious for its art, but which is useless for the practical purpose of the projected building. Just what steps any individual architect may think fit to take to obtain from his client a rational statement of the desired accommodation and the price he is willing to pay may safely be left to the discretion of that individual architect.

The suggestions that a rough design showing the cubic contents of the house and an estimate of its probable cost should be made immediately the first instructions are received, and that the client should be invited to amend his instructions in the light of this hurried sketch, will only be useful in special cases. The suggestions presuppose either that the architect is exceptionally gifted in the visualization of all the factors of the design in a short time, or that he is prepared to estimate from an ill-conceived and partially developed plan. On the whole, it is to be hoped that the R.I.B.A. will adhere to its scale of charges, but will let it be understood that well-developed and economically practicable schemes ought to be produced as the basis of any claim for fees on this scale.

If a policy based upon fear of the builder with his "plans and estimates free" is to be resorted to, the architect will find that he has to descend to the same level and make sketches and estimates gratis, in the hope of obtaining commissions at a later stage for preparing working drawings and details and for supervising the work. It is surely a more dignified and an altogether more satisfactory policy to take time to make a creditable design and charge a reasonable price for it. Clients who appreciate the cheap and nasty type of plan may well be left to those who invite their questionable patronage.

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A photograph of this detail is given on the preceding page.

October 1925.

NEWS AND TOPICS

CHEAPER BUILDING—CAST-HOUSES—THE PASSING OF THE MINISTRY OF TRANSPORT

INTERESTING conferences have been taking place in private, so I am authoritatively informed, between certain well-known architects, builders, and representatives of the principal Government departments, with a view to improving building practice and building education. According to Mr. A. C. Bossom, who until recently was a commercial architect in New York, by better organization and by progress scheduling it will be possible to readjust our present system of building so as to pay the worker practically the same pay as he receives today for the same amount of time, give the contractor the same percentage of profit on the cost of labour and material, and yet cut down the ultimate costs to the building owner anywhere from 5 per cent. to 10 per cent. Most architects will agree that the fuller the working drawings are before a contractor is allowed to start on building operations, the less the subsequent delays. In America and Canada meetings are held on the building at least every two weeks between the representatives of the architect, the builder, and each of the sub-contractors, so as to ensure that the regular schedule is maintained. It is expected that before long the Board of Education will introduce a proper study of this subject into our various technical schools.

* * *

We are hearing a good deal at the present time about the so-called novelty of casting the walls of houses, complete with windows and door openings, in workshops, and then using mechanical means to assemble the parts when cast. I am told, however, that houses built by this method before the war are still in existence. The late Mr. H. W. Buddicom built two buildings: one an " L "-shaped farm building, and the other a two-story cottage in Flintshire. Hand winches were used to raise the windows into position. Mr. Buddicom is stated never to have patented his experiment, but the buildings have proved to be satisfactory in every way, and are quite weatherproof.

* * *

Some weeks ago I referred to the possible effect of the abolition of the Ministry of Transport upon town-planning and architects. From the point of view of the architectural profession, as well as in the interests of national economy, I rejoice at Mr. Winston Churchill's announcement in his Budget speech that this Ministry has to go. The Roads Department is, I understand, to be attached to the Ministry of Health. Although no doubt Sir Henry Maybury at the Ministry of Transport, and Dr. I. G. Gibbon and Mr. G. L. Pepler at the Ministry of Health, have worked together in complete harmony, nevertheless, in the preparation of regional and town-planning schemes, it must inevitably cause difficulty for the question of the roads to be considered by two separate departments. Should the Roads Department in the future come under the control of Mr. Neville Chamberlain, as is generally expected, this should ease the position. I am afraid, however, that financial stringency still makes many of our local authorities slow to recognize that wise planning is the truest economy.

London's latest theatre, the Arts Theatre at 6 Great Newport Street, has been designed by Mr. P. Morley Horder. It is admittedly an intimate theatre with a fully-equipped modern stage, and stalls, circle, and boxes to accommodate some 300 people. The present theatre has grown from merely a ground-floor shop with its workshop behind. I went over the new buildings a few days ago and was surprised to discover that in addition to a stage with a grid, dressing-rooms, and auditorium, there were club-rooms, including a dining-room and even a dancing floor. The theatre is lighted from a large panel of diffused light in the centre so as to avoid any glare or any distracting points of light. The whole object has been, unlike some flamboyantly decorated theatres, to keep the surfaces absolutely plain so that the eyes of the audience may be concentrated on the proscenium. The existing plate-glass front in Newport Street has been removed, and a simple plaster treatment has been adopted to give some restfulness to the entrance. I think that the directors have missed an opportunity in not placing the emblem designed by Mr. McKnight Kauffer on the outside of the theatre instead of in the vestibule. This sign expresses cleverly the idea of the older generation leading youth into the light. The object of the Arts Theatre Club is to encourage the work of new playwrights, designers, composers, and all those associated with broadcasting.

* * *

From a Disembodied Architect

Do architects deliberately provoke mystery by their designs? Or do MAN and manners alone create the " air " of a place? Did architects construct the narrow, dark, and irregular alleys in the neighbourhood of Clare Market and Wych Street, encumbered with low projecting eaves, arched doorways and bulkheads which offered facility for attacks of footpads? If they did, then they are responsible for the poor young man from the country, carrying a black bag, who started one winter's night from Portugal Street to get into the Strand, and has been seen ever since, especially on foggy nights, wandering round about, constantly returning with a disconsolate aspect to his original starting-point. Clare Market led eastward into Lincoln's Inn Fields. The proprietors of Clare Market Chapel filled their chapel vaults with the coffins of their brethren as a variation from the commonplace method of interment, and when these brethren were springing their coffins, and in a fine state of putrefaction, let out the floor over the vaults as a dancing-room to a society of teetotallers. Another street hereabouts, in which stood the Playhouse of Gay's " Beggar's Opera," acquired a sort of cant notoriety as the locality of an Insolvent Debtors' court. It had no name; was known, I suppose, to postal sycophants as " the street which goeth to Plough Stables."

* * *

But if we like our Defoe we must reserve the true thrill for a building at the farther end of Covent Garden, where it runs into Long Acre. In 1665 it is a silk warehouse. A wagoner discharges a consignment of oriental stuffs from the agents in Holland. A counting-house clerk handles a bale. He unrolls the silk . . . and the Plague is in London! In a short while people will be chalking white crosses on their doorposts.

ASTRAGAL

INDUSTRIAL PEACE

[BY J. E. DROWER]

THE country yearns for industrial peace, knowing it to be vitally necessary. This call for peace indicates that there is war; the relations of employers and employed are such as to justify the use of that dire word; the abortive general strike, the bitter coal strike shut out any other. Both sides are getting weary; the public is grasping the fact that the real victim of the strife is itself. The readers of THE ARCHITECTS' JOURNAL are more directly interested in the building trade than in any other. So these remarks must be applied particularly to that great industry, the largest, in some respects, of all our industries. And it is a protected industry.

In a speech made a short time ago, in London, Mr. Ramsay MacDonald said: "I say, stop talking piously about peace and do get together. I should like, for instance, the Trades Union Congress to get together with a similarly representative body . . . to get an exhaustive catalogue of the causes of unsettlement agreed to, and to take steps immediately to deal with these items and remove them." These words were preceded by others breathing anything but a spirit of peace. And yet, after all, this suggestion indicates that Mr. MacDonald thinks peace necessary.

Who is to choose the members of Mr. MacDonald's council, and would its decision be accepted? The President of the Trades Union Congress is Mr. George Hicks, who is also the secretary of the Bricklayers' Union; his views, crudely expressed, show only too plainly his unaccommodating spirit.

The Government has constituted a Standing Committee on Mineral Transport, and has invited the miners' executive to nominate a member. They chose Mr. Cook; he does not stand for industrial peace, and this unfortunate incident augurs ill for Mr. MacDonald's council. Consider for a moment what the discussions would be like. What a babel of conflicting opinions! Jack Cade and Bentham, Ricardo and Cobbett, Marx, Vandervelde, Jaurés, Cole, and Mr. MacDonald himself would be brought into discussion; the flood-gates of talk would be opened full wide and we should be deluged with the long words and strange locutions of the Socialistic vocabulary. We all agree with Mr. MacDonald that it is time to finish with talking, but his method would hardly conduce to that end. To engage in a serious, organized attempt to produce industrial peace is to enter upon a great enterprise demanding a proper equipment of facts and information, a complete knowledge of the problems to be solved. The well-meaning efforts of kindly, but ill-informed, sentimentalists will come to shipwreck against the dogged obstinacy of extremists on both sides, and would do more harm than good by raising unrealizable hopes.

Mr. J. E. Drower.

In this short article it is not possible to do more than briefly note some broad facts. First of all, we cannot look for a permanent solution in a world ceaselessly evolving. Next, it is futile to pretend that the views of the two protagonist parties—masters and men—are not at variance. And, finally, we must keep the fact steadily before us that the views of the Communist and Bolshevist Labour leaders are not merely more extreme than those of the vast body of trade unionists; they are something entirely different. The moderate views of the majority of the workmen are incompatible with Communism; and the question is whether, in the long run, the Communist minority or the moderate majority will prevail. The minority make up for the smallness of their numbers by energy, determination, and ruthlessness. The majority are as sheep driven hither and thither wheresoever the minority chooses. And yet, in this docile majority lies the hope of peace; they want it; they long for it. The minority may preach the specious doctrine of limitation of output; in their hearts the majority feel its dishonesty, but they are under trade union tyranny, and seem incapable of the effort of shaking it off and freeing themselves from the despotism of rules, not only those written, but those far more dreaded—the unwritten. On the side of the employers there are extremists too—men who refuse to see that the world has developed, not only in material things, but also in ideas, that "values" have changed. These men are also a minority, but by no means such a threat to industrial peace as the extreme minority among the workmen.

Between the views of the moderate majority of the workmen and that of the masters there is still a great gap; the problem facing us is how to fill it. For it is to the moderate men on both sides that we must look for salvation. The extremists must go; for them there must be no quarter; *delenda est Carthago*. The extremist movement among the men is of recent growth. It is true that the doctrines of Marx and of the Continental Communists have been preached in this country for years, but they have been listened to dubiously until lately. How far the Government attitude towards labour in the four years of war may have been dictated by high policy, and how far by less noble feelings, we need not inquire. Many people felt and said that what was then being sown would produce a sad harvest later. And they were justified; Communism sprang up after the war like a weed in the trade unions, for the soil was receptive. Those who had fought hoped to come back to a new world. The vague words "a new earth," "brotherhood of man," "equality of service," and the like had been dinned into their ears and were translated by many as meaning that, from henceforth, class barriers would be broken down, poverty would disappear, and all the world would live lovingly together, sharing equally all things worth sharing, including abundant leisure. They were disillusioned and in their disappointment, listened to the voice of the Communist.

[This is the sixth of a series of articles on the future of the building trades. The articles will be contributed by a distinguished group of architects, builders, politicians, and business men, all of whom have considerable experience of various sides of the subject. The first article, by the Rt. Hon. J. Ramsay MacDonald, M.P., appeared on January 5; the second, by Major Harry Barnes, on January 19; the third, by Mr. Harlan Thomas, on February 2; the fourth, by Mr. Edward J. Strange, J.P., on March 9; and the fifth, by the Rt. Hon. William Graham, M.P., on April 6.—Ed., A.J.]

Those who stayed at home were disappointed too, when their weekly earnings dropped; prices rose; they found themselves little better off than before the war, perhaps worse off even, for their standard of living had gone up. Their discontent made them also an easy prey to the facile doctrines of Marx. Again, there is disappointment and something like a reaction.

Profit-sharing is looked upon by many as the panacea for labour discontent. In its simple form it cannot be applied to the building trade; or, rather, no method of applying it has yet been evolved. The difficulty is that men move from job to job and stay no long time in one place or with one employer. Besides, it is a very risky trade. Recent articles in the daily Press on labour in the United States show that here and there in some special trades profit-sharing has been successful, while in other trades it has been a failure. Give the workmen wages enough, something in the hand at once, and they do not ask for a share of the profits. "Talk to them of loyalty to their firm and you speak a language they do not understand," says one writer. The men go to the best money.

What remedy do you propose for the present differences? the reader may well ask. Let me repeat the words of Hanotaux in his book, *Democracy and Labour*: "If I knew the remedy, be quite sure that I should not keep it to myself. With a wave of my wand I should turn this vale of tears into a paradise." The great body of workmen know that to carry Communism into effect can only be done by a revolution, and they hesitate, knowing well that they themselves would be the greatest sufferers. What is known as the "capitalist system" is, in its essentials, that in which the world has moved for untold centuries; it is so deeply rooted in the consciences and habits of mankind, it has become so much a part of ourselves, it has authority so venerable that to tear it up by the roots would give a staggering shock from which humanity would take long to recover. But, luckily, there are few to assert that it is fixed, immutable, and cannot be improved. Slowly but surely as time changes take place, privileges have to yield to the persistent battering of opinion; the idea of mutuality in the relation of employers and employed grows; the right of what used to be called the "lower orders" to some of the good things of life is not denied, and steps are made daily towards enabling the worker to have a voice more and more authoritative in the management of his trade. There will be no sudden upheaval; the changes will come almost imperceptibly. While it is our duty to give our sympathy and help to those striving legitimately to make their lives brighter and more free from the dread of the misery that comes from poverty, we must not forget that we live in a world of insurmountable economic facts, to ignore which is to fight against the gods.

ARBITRATION

[BY ST. J. S.]

THE object of persons engaged in dispute as to respective rights or obligations is to get that dispute definitely and authoritatively settled without unnecessary or unduly burdensome expenditure of money and time. Waste of much time, money, and effort may, and does, occur in relation to many differences as to the safest and wisest method of resolving a dispute. Doubt, suspicion, and prejudice should be absent from the minds of those who agree to a submission to arbitration, and the conduct of the contest must be prompt and free from any entanglements which cause either unnecessary delay or unnecessary expense. The chief desirability in the interest of both parties is the choice of a wise and experienced arbitrator or umpire, and the first need to decide is from what profession should he be sought. In very many instances practising barristers are nominated and the natural tendency is to seek the help of well-known men in extensive work, not only as arbitrators but as counsel. The men so selected are very fully employed during a large portion of every day, and they, of necessity, fix late afternoon appointments for the hearing of the arbitration. Constant adjournments are too frequent. In the interest of justice the rule of the London Court of Arbitration should be insisted upon:

> The hearing of every case shall, so far as circumstances permit, be taken at the earliest period possible, if the parties so desire, and, subject to such adjournments as the Arbitrator, Arbitrators, or Umpire, think necessary, just or convenient, shall be continued *de die in diem*.

Counsel and arbitrators should be chosen from among those who can comply with such a rule as I have quoted. I have known and I suppose many others will know of cases which have dragged on before arbitrators for many months which could have been disposed of in Court in one-tenth of the time and with much less expense and anxiety to the parties. The fees required by arbitrators and umpires are not fixed by law or custom. That which an arbitrator judges a fair recompense for his work is endorsed by him upon the sealed envelope containing his award, and in ninety-nine cases out of a hundred must be paid by the party taking up the award before he can be aware of its nature. Would it be unreasonable or incompatible with a capable and useful decision of differences that the submission to arbitration should contain some definite scale of fees such as the schedule to the rules of the London Court of Arbitration, or such modification of that scale as would meet the needs of the contestants?

But the other subject is of greater importance, namely, that in the interest of justice no unavoidable delay, nor interruption of the continuous hearing of the dispute shall be countenanced. The continuous and uninterrupted hearing of cases determined by judges is a practice which has held, in this country, throughout centuries, and is one of the principal distinctions of judicial procedure. It is natural, though I hope to show unnecessary, for those who may be engaged in a serious contest, whether as principals or advisers, to turn to well-known and tried men to decide, or assist in the decision, of disputes. Ordinary common sense, high intelligence, and sound professional training are needed by any and every person who may have the duty of hearing and determining any matter in litigation, and such attributes are more than common in every walk of life. It is therefore unwise to insist upon the choice of an arbitrator from among barristers in overwhelming practice. Consideration should be had as to the trade or profession concerned. A timber, or shipping, or building difference on any contractual subject will more easily and more successfully be resolved by agreement upon a reference to some competent person with the necessary professional or trade education, acquirements, and abilities. Many could have convinced me of the desirability to consider with great care questions as to whom the reference of a dispute shall be made, and in a majority of them I have regretted insistence upon an eminent practising lawyer as arbitrator, because of wasted time, much unnecessary work, and exorbitant expense.

THE NEW PAVILION AT HASTINGS

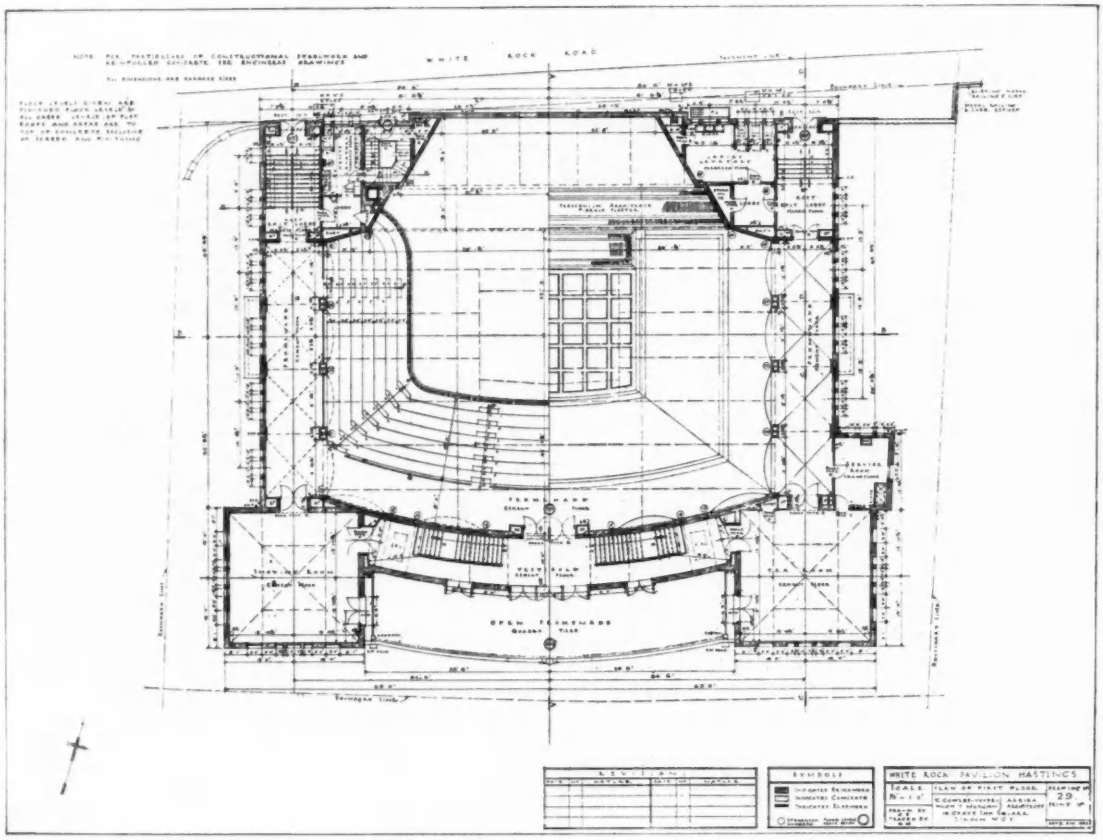
[BY M. L. ANDERSON]

HASTINGS, like any other sea-coast town, exists mainly by virtue of its ability to keep its population amused, and the new pavilion signifies a further effort to entertain both the people who live permanently in the town and the many visitors who come to it. The diversity of tastes, the likes and dislikes of the patrons, enforce a wide variety of programmes, so that perhaps it is not surprising to find the Corporation demanding for its new pavilion that it shall be designed to provide for entertainments of several kinds. What is surprising is to find in the finished building a perfect compromise of design suitable to all its widely-divergent uses.

It is unfortunate that the position for the White Rock Pavilion should have provided so formidable a list of limitations. The building fills the whole area of its site, which is barely wide enough and very restricted in depth, so that, where one would like to see a lawn or other decorative approach, one has merely the tram-lines, and it is almost impossible to get a good view of the front of the building. This oddity of plan has resulted in an auditorium of distinctly unusual shape, and also in the fact that the small secondary hall, which was one of the essentials of the scheme and seats 500 people, has had to be relegated to the basement, which, being situated below water level, has had to be tanked in concrete to guard against damp and to overcome the considerable pressure. Taking into account the difficulties of site, the architects are to be warmly congratulated upon a very good piece of design. The outside of the pavilion is faced with stucco of Atlas White Portland cement, which derives a slightly creamish tint from the introduction of carefully-selected sand. This cheerful effect is emphasized by the use of red pantiles and by six terra-cotta plaques in colour; the coat of arms over the entrance has also been picked out in colour, and the two flagstaffs at the first floor level are painted bright red. The general plan of the elevation is that of a bow front abutting on rectangular wings, in which, on the ground floor, are a tea-room and the reading-room, and above, a smaller tea-room for the circle and the saloon. Both these last-named rooms are approached from the auditorium, as well as from the first floor foyer, and give, in addition, on to the open balcony above the main entrance. This balcony is to be used in summer for the serving of teas and light refreshments, and has a pleasant floor of red tiles which harmonize with the pantiles of the roof. The fenestration on the ground floor hardly succeeds in suggesting the presence of the staircases, which actually obscure one window on each side of the entrance, but it is difficult to see how this could have been avoided without sacrificing the rhythm of the elevation or the convenience of the plan.

Having lavished colour " nicely and to a man's delight " outside, the architects have wisely kept the interior down to a study in tones. The wall-surfaces throughout, except in the tea-rooms and the lower hall, are treated with *stuc*

The White Rock Pavilion, Hastings. By Charles Cowles-Voysey and the late Hugh T. Morgan. The exterior.



The White Rock Pavilion, Hastings. By Charles Cowles-Voysey and the late Hugh T. Morgan. The plans.

The White Rock Pavilion, Hastings. By Charles Cowles-Voysey and the late Hugh T. Morgan. The rostrum, from the balcony.

which has been treated with a rubber stippler. The effect at close quarters is perhaps a trifle broad, and although in the auditorium the texture is very pleasing, a finer surface might have been better in the passages. A suggestion of reflected colour is given by the use of metallic paint, which has been glazed to protect it from the tarnishing properties of the sea air, but the colour itself is actually supplied by the silk lamp-shades. Although by day the decoration is quite adequate it really derives its full quality from the use of artificial light. The architects have avoided any suggestion of classic forms and proportions; the mouldings, whether in plaster or timber, and the cornices show a freedom of thought which is entirely in keeping with the purposes of the pavilion. For a building which is to be used alternately as a concert hall, a cinema, a dance hall, and occasionally as a music hall, the introduction of any stylistic or period ornament would be too didactic, and the wisdom of avoiding all but the freest and simplest of forms is unquestionable. The cornices everywhere are restrained, and, without asserting their presence, still serve to soften the meeting line of wall and ceiling. The architraves and bolection mouldings of the doors suggest the same trend of thought, and although they have the smallest convenient projection, are quite adequate by contrast with the flatness of the general treatment. Much of the effect of the doors lies in their admirable texture; oak is the material used, and the quality of the grain has been intensified by sand-blasting (very slightly, so that all effect of deadness has been avoided), and then the surface has been waxed.

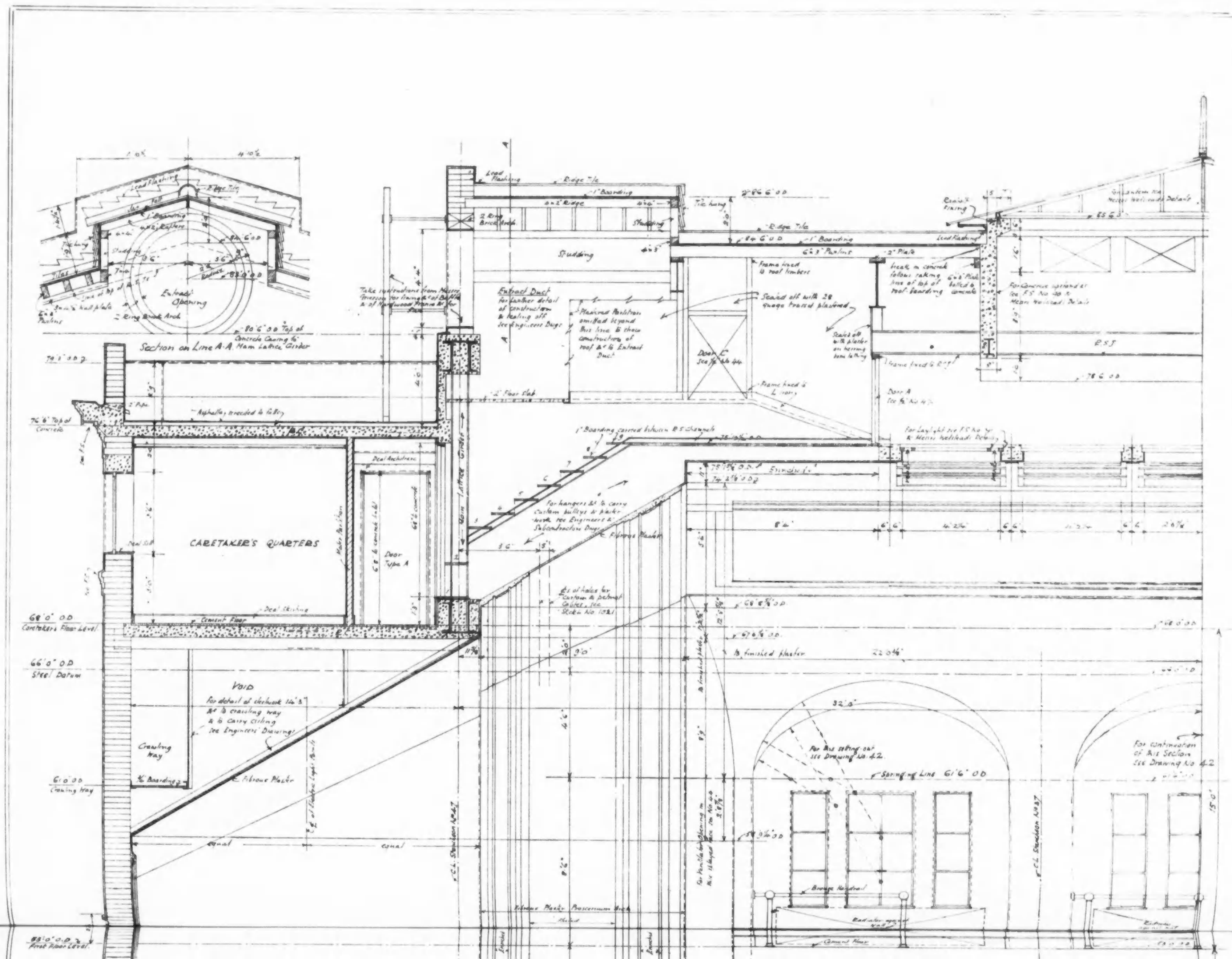
Taking the building as a whole, it has the most amazing appeal to all classes of the community, and overcomes what would appear at first thought to be almost insuperable difficulties. On Friday you may go to dance there in an atmosphere of frivolity comparable with the *banalités* of the most staggeringly vulgar winter garden; and on Saturday they may give a chamber music concert, and you can listen to Beethoven in surroundings which, by their very repose-fulness, leave the mind in a receptive mood. The acoustics of the large hall may be said to reach absolute perfection. The unusual shape of the auditorium, which the nature of the site demanded, made the attainment of satisfactory acoustic forms more difficult, but the architects allowed Mr. Hope Bagenal as free a hand as possible, and modified both the forms in the hall and the finish of the decorations to conform with his suggestions; the result is that no matter in what part of the auditorium one sits the tone values are perfect, both for voices and for instruments. The orchestra in the lower hall sits directly under that in the main hall, and yet one may stand in the one while the orchestra, with brass and drums, is playing in the other, and hear nothing of it; from time to time, in a particularly loud passage, one seems to *feel* the music, but it would be unwise to say definitely that anything can actually be heard. The reason for this lies in the fact that the floor has been insulated with three layers of Cabot quilting with air spaces between. And it is particularly gratifying to find such perfect acoustics, in view of the storm of criticism which fell upon the pavilion in its early stages.

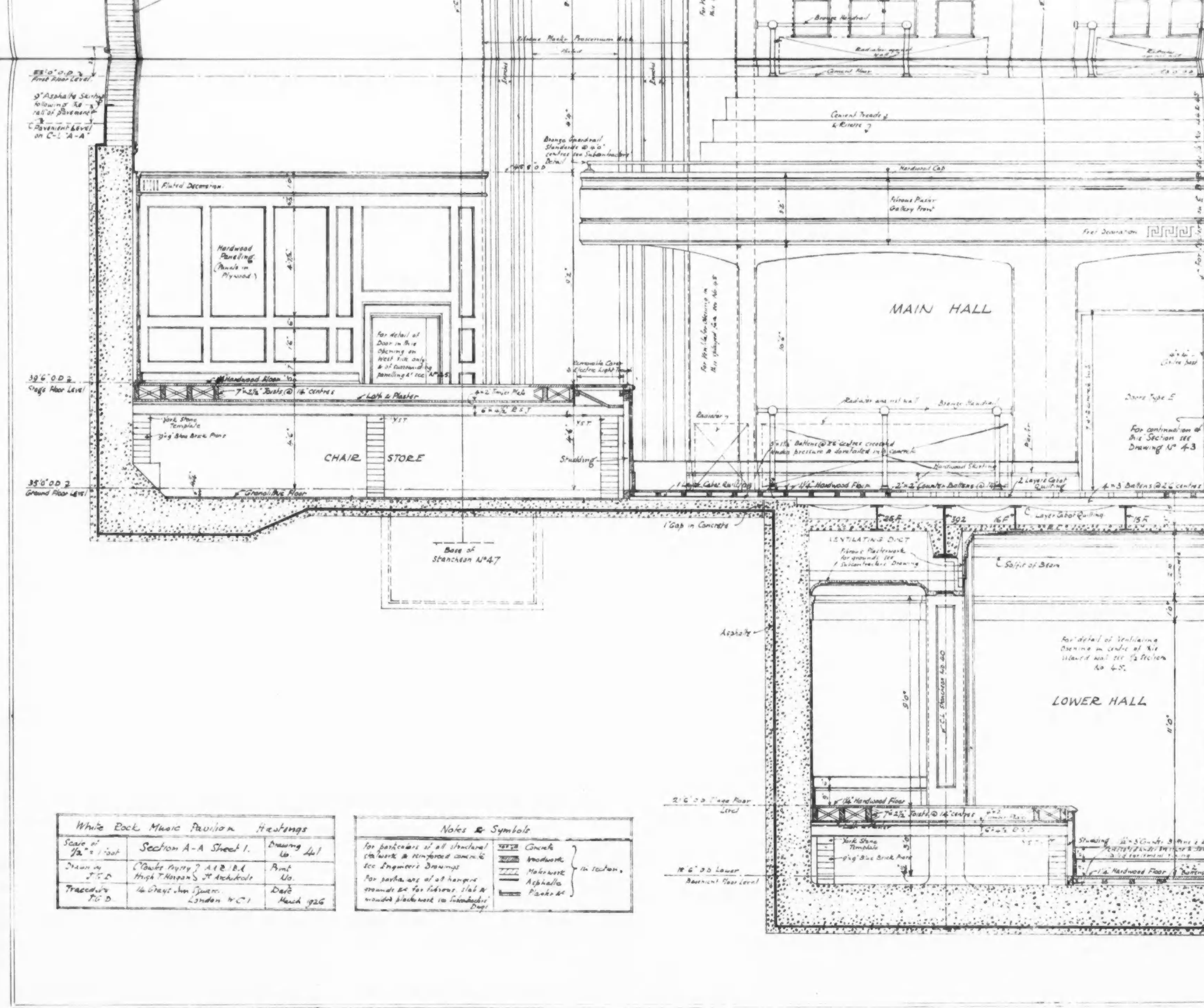
In point of fact, on the advice of Mr. Hope Bagenal, the architects deliberately designed for loudness and for excellence of musical tone, combined with a short period of reverberation, and reflecting, resonating, and absorbing surfaces have all been used at various parts of the hall.

The splays above and at the sides of the rostrum are large and efficient, and hard plaster was used in them. In addition to this the wood resonator round the platform reinforces the low tones at their source, while the high notes are given their full intensity by the hard plaster on the splays and ceiling. The curve of the roof was carefully worked out, and reflects directly upon the seats, in a single impact, all the sound which touches it. The upholstered seats absorb much of the volume of sound as it reaches them and helps to reduce excessive reverberation; in this way the hall becomes practically an instrument to the music produced within it.

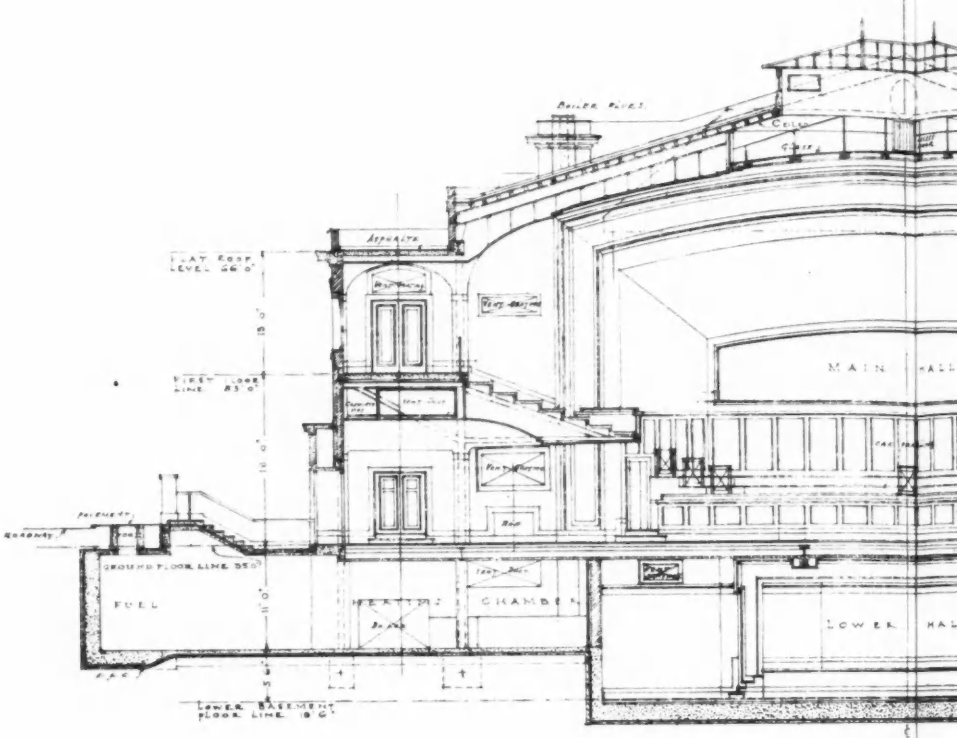
The lighting of the auditorium is one of the more interesting features of the building. Daylight is admitted to the balcony from rows of windows at each side, to left and right of the stage; while a concert is in progress, however, the curtains are drawn, and top lighting is obtained from the large glazed panels in the ceiling. The glass is of a greenish tint, and gives a diffuse, mellow glow, which contrasts with, but at the same time seems to echo, the artificial lighting of the rostrum. At night an amber glow is obtained by drawing over the skylight a curtain, whose underside is in the nature of a reflector to the electric bulbs which flood the green glass. The yellow of this light practically cuts out the green tint which is given by daylight. There are, in addition, a number of shaded hanging lamps, but these, as a rule, are not lit up during the actual playing of a piece. The treatment of the rostrum seems to bring the audience into closer contact with the orchestra, and this feeling is intensified by the similarity of the lighting effects in these two parts of the house. The whole of the lighting is very subdued, and almost the ideal one in which to listen to music. The aims of the architects were, first, to provide an atmosphere of repose, and yet of cheerfulness, and, secondly, to make the design appeal to all classes of the community. The first object has been achieved by the apt use of colour as opposed to form. Here are none of the swags and panels which one is accustomed to see in such buildings at seaside towns; the walls are allowed to look like walls, and lack the familiar pilasters and orders which mean nothing; the colour in the tea-rooms is bright, and contrasts effectively with the duller tone of the metallic paint in the auditorium and passages; the walls of the lower hall are smoothly finished, and their golden yellow gives an atmosphere of levity proper to a place which is to be devoted largely to dancing. Secondly, the whole building, both inside and out, seems to appeal to everybody who sees it. There is nothing strange in the fact that a few people should approve the simplicity; but standing in the balcony I had the interesting experience of hearing comments from crowds who had come to make a first inspection of the place; they passed through in little groups discussing the decorations, and one-half expected that the absence of treillage work would prove a thorn in the flesh of the many to whom that is one essential adornment of such a building; and yet from all the people who passed there never came one adverse comment. The secret of this success lies almost entirely in the restraint which has everywhere been exercised. Were the building intended for use purely as a dance hall the decoration might have been positive and definite; a certain drabness might be satisfactory for a Bach fugue, but to have achieved a fine compromise between the two is in the nature of a triumph.

The White Rock Pavilion, Hastings. By Charles Cowles-Voysey and the late Hugh T. Morgan. The auditorium, from the balcony.

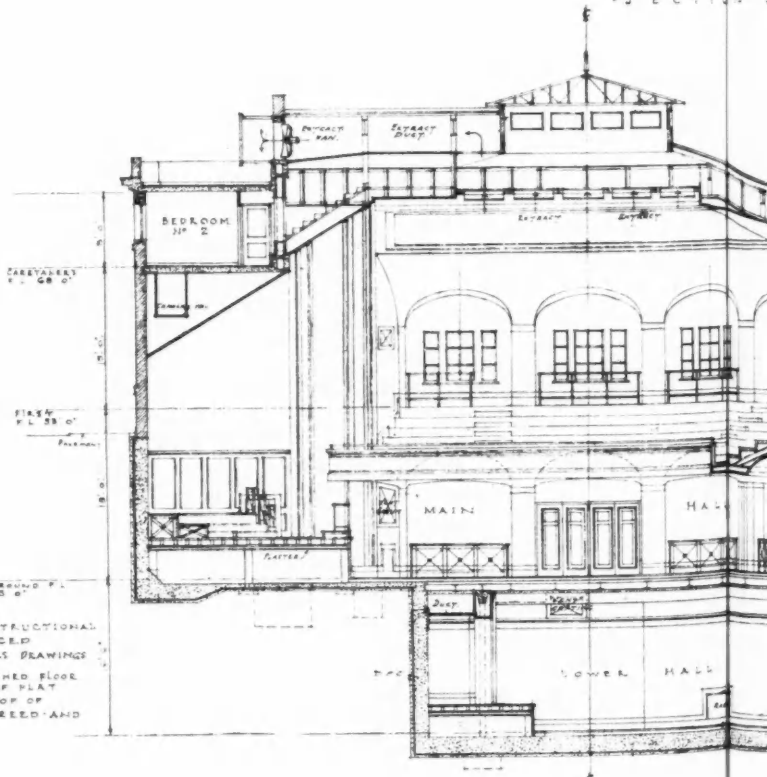

Section on Line A-A
CARETAKER'S QUARTERS
Void
Crawling Way
Studding
Extract Duct
Door Type A
Steel Datum
Caretakers Floor Level
Entrance Opening
Springing Line 61'6" OD
For continuation of this Section see Drawing No. 42
Main Lattice Girder



THE WHITE ROCK PAVILION, HASTINGS. BY CHARLES COWLES-VOYSEY AND THE LATE HUGH T. MORGAN. DETAIL OF SECTION A-A



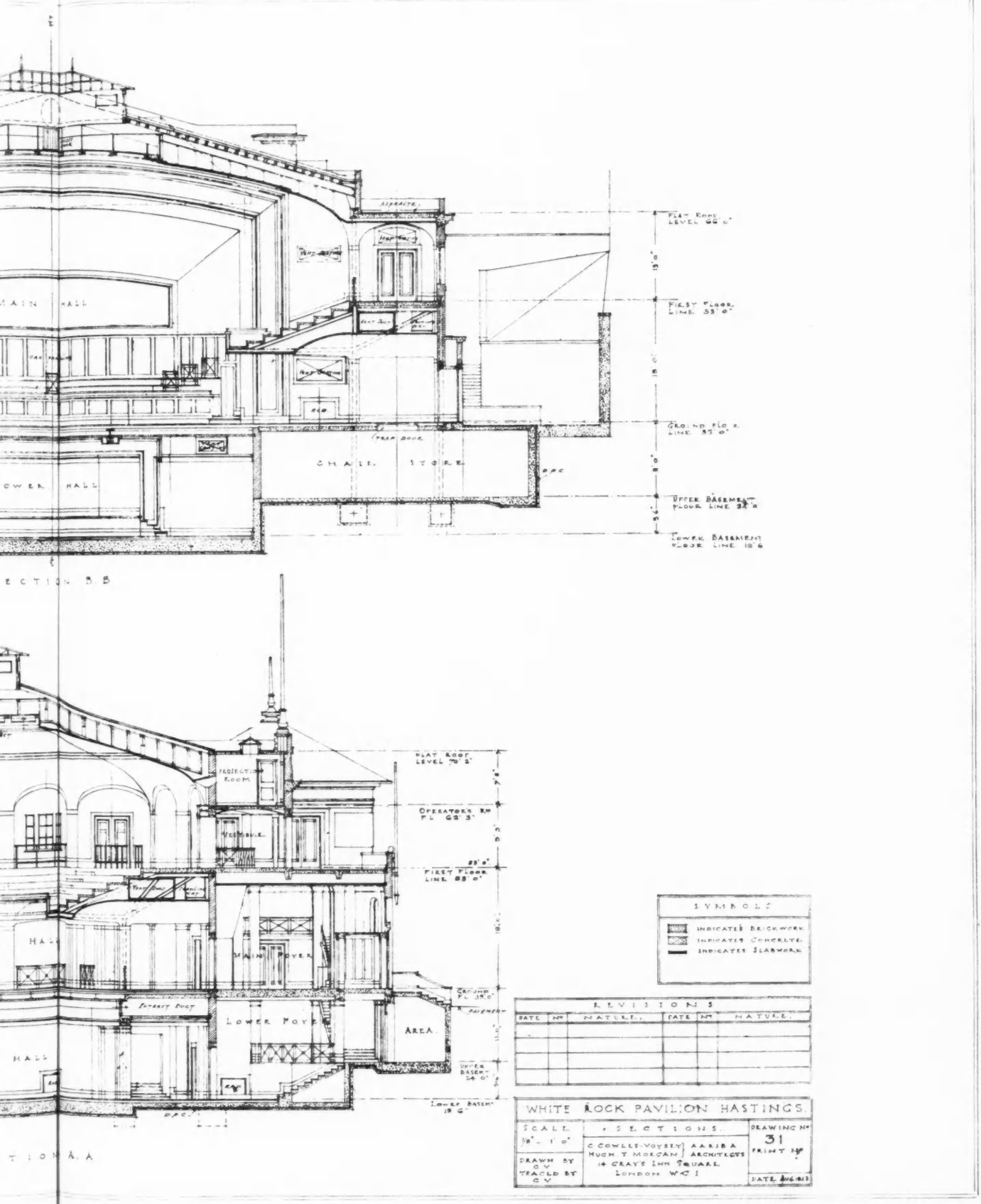
SECTION



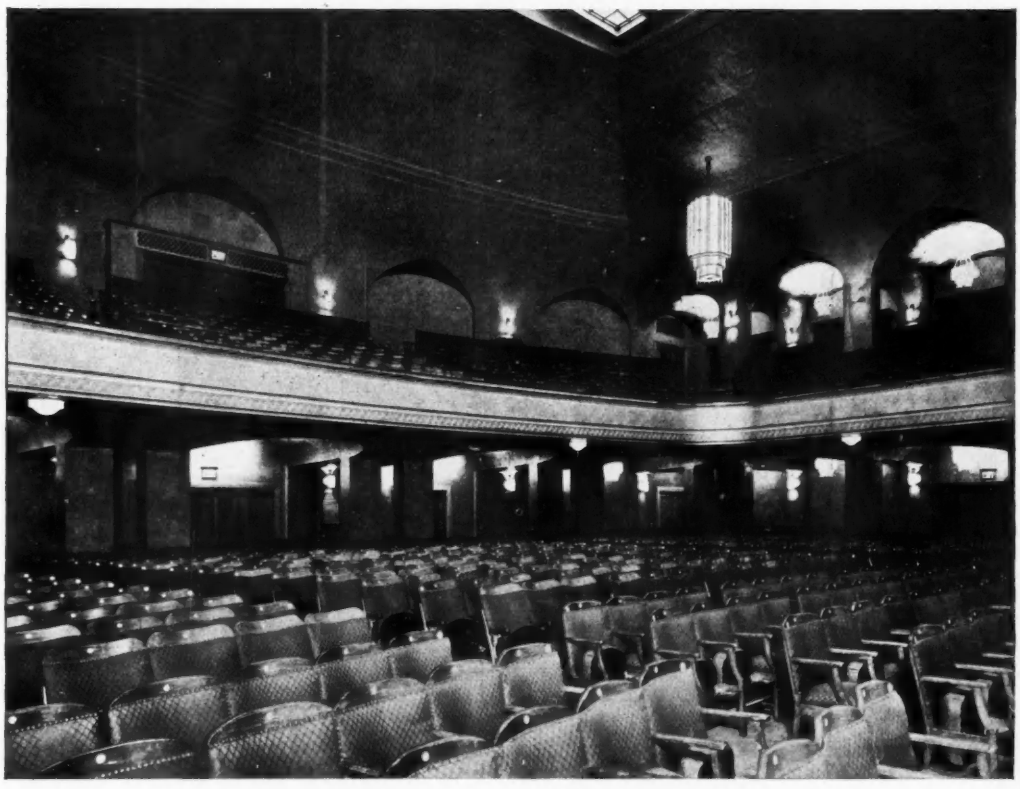
SECTION A.

Note FOR PARTICULARS OF CONSTRUCTIONAL STEELWORK AND REINFORCED CONCRETE SEE ENGINEERS DRAWINGS

FLOOR LEVELS GIVEN ARE FINISHED FLOOR LEVELS IN ALL CASES. LEVELS OF FLAT ROOFS AND AREAS ARE TO TOP OF CONCRETE EXCLUSIVE OF SCREED AND FINISHING.



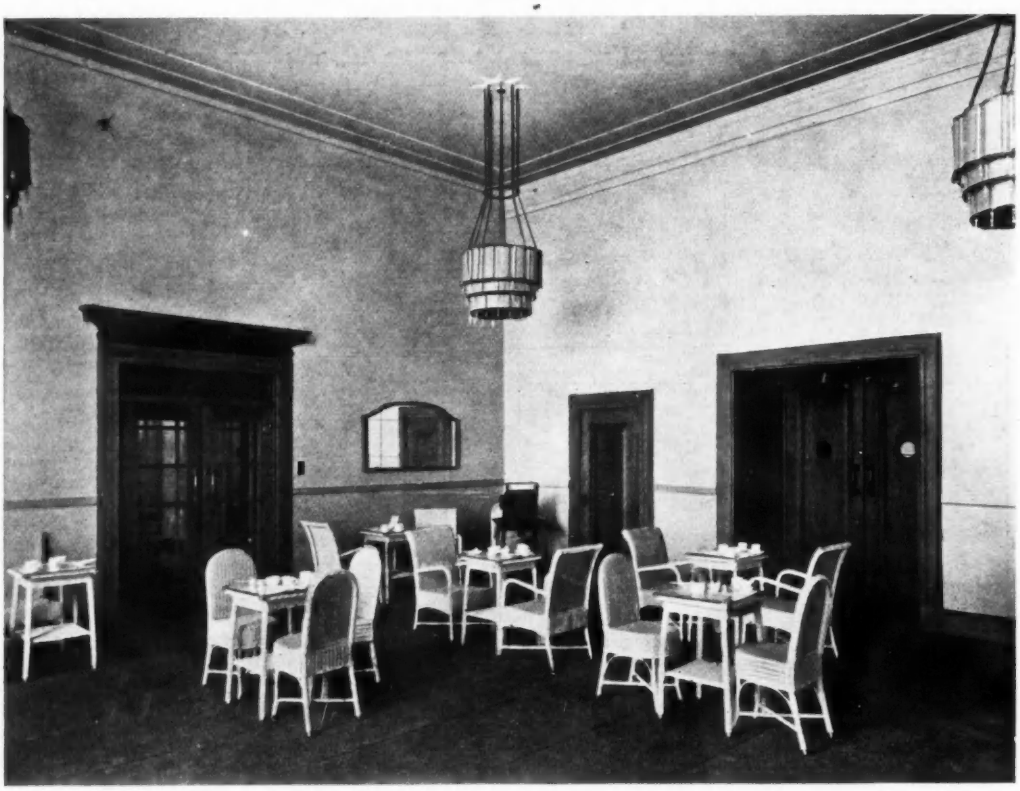
THE WHITE ROCK PAVILION, HASTINGS. BY CHARLES COWLES-VOYSEY AND THE LATE HUGH T. MORGAN. SECTIONS



The White Rock Pavilion, Hastings. By Charles Cowles-Voysey and the late Hugh T. Morgan. Above, the entrance foyer. Below, the auditorium.

The White Rock Pavilion, Hastings. By Charles Cowles-Voysey and the late Hugh T. Morgan. Above, the lower hall. Below, part of the balcony promenade.

The White Rock Pavilion, Hastings. By Charles Cowles-Voysey and the late Hugh T. Morgan. Above, the basement foyer. Below, the balcony foyer.



The White Rock Pavilion, Hastings. By Charles Cowles-Voysey and the late Hugh T. Morgan. Above, the tea-room on the ground floor. Below, the open promenade.

FAREWELL TO ARCHITECTURE

[BY A PUBLIC SCHOOLBOY]

AT the beginning of 1926, in answer to the usual inquiries as to what I intended to be when I had grown up, I answered always with great enthusiasm that I was going to be an architect. At the beginning of 1927 the answer was different, and every one wondered why. I am going to try to explain the phenomenon.

To begin with, it should be understood most definitely that there is no lack of confidence. I believe, as I always have believed, than I am an architectural genius of the first water. This confidence makes it all the more surprising that I should renounce architecture professionally, and the reason can only be that I do not believe that architectural genius will rise to the top of the architectural profession as it now is. That is, more or less, the conclusion I have reached, which has daunted my bumptious heart. The reasons for my conclusion are that during 1926, and before, I met a considerable number of men who had become architects, and a considerable number of boys who were going to become architects, and the two classes combined to discourage me from following in their footsteps.

I shall deal first with those who had become architects. The first and best known of these was Mr. Lloyd-Bluff. He, I need hardly say, did not try to deter me in the least. The picture of health and happiness, prosperous, popular, energetic, artistic, *he* was not the man. Anyone would long to be an architect who saw the stream of jobs which flowed into his studio, the speed with which some secret agency executed them, and the unruffled ease with which Mr. Bluff imparted to the work of the secret agency some touches of his own inimitable style. The reason why I was not convinced by Bluff was that I could never, I am sure, become quite the man of the moment. I should never be sociable enough to support a fashionable clientele, and my style would never be the light and picturesque touch of the popular architect. Posterity doubtless would applaud, but Mayfair and Chelsea would think me dull.

I now turn to the active deterrents. Of these, the first was an old man long since retired. He lived frugally near the scene of his former practice, engaged in regretting three things: first, that his father had been an architect; secondly, that he had been an architect; thirdly, that his son was an architect. When I was introduced to him as one who intended to be an architect, he became one huge negative. The entire experience of his lifetime was divulged to me in the word "Don't"; and that advice certainly made me think.

The next was a young man who treated me to much the same advice, only in a more pompous manner. He told me never to forget that I should find plenty of hurdles to jump, that I must look before I leap, that taking one consideration with another (*bis*) an architect's life was not a happy one. I could not help wondering why he was so pessimistic. He was a clever architect, with a good practice, beloved of the R.I.B.A. Yet he saw, apparently, no future for him, but just an avenue of model houses, ideal homes, labour-saving devices, bungalows, cottages, week-enders, ingle-nooks. I don't believe he ever hoped to design a house costing over £2,000. He went in for the big competitions, but he flew with his wings clipped.

Before I turn to the other kind of deterrent, the would-be architect, I feel I must explain the effect on my boundless enthusiasm of these three men. As I have shown, I felt I was not picturesque or light-hearted enough to catch the attention of Mr. Lloyd-Bluff's desirable clientele. Mr. Wilbin, the retired architect, was regrettably Gothic, which I am not, as well as very poor, which I have no desire to be. Lastly, poor Mr. Crispin was so cramped and stunted, his clients were so stunted, his little houses were so stunted. The one thing he thought was, Why aren't people a little richer? That was not the element for me, with my glorious visions of stately country houses, homely country houses, houses, in fact, worthy of the land.

I believe there has always been a class of youth who, on account of a vague propensity for drawing, has determined to take up architecture, and in some cases done so. What the connection is between drawing faces on blotting paper and keeping the rain out of a house I don't know; however, the type persists. I happened last summer to stay in a house with six other boys. It struck me as significant that of them two besides myself were interested in architecture. Of the two, one was definitely starting as an architect, while the other was merely interested. The world would be a strange place if of every seven people, two were architects, and a third dabbled.

The boy who was on the threshold had started by being able to draw. Draw he could, with great ability; but I shudder to think of his architectural career. I have only seen one product of his genius—it was a Gothic chapel, the ugliest thing I have ever seen on paper. It wasn't purposely ugly, like Victorian chapels—it was just ugly because its perpetrator didn't know the difference between beauty and ugliness. He hotly denied my suggestion that it was Gothic, and soon I found the reason why. The whole thing was a copy, and a libellous copy, of another chapel erected at this boys' public school by a famous architect. Where in the original there was a square-headed window, the copy had made it cinque-foil; in fact, what was plain in the original was clumsily embellished in the copy. Here was the work of a boy who was just starting as an architect; call it premature, but even so it was so bad that it marked the boy as permanently and irrevocably incapable of producing anything beautiful or ingenious.

The other boy was not going to be an architect at all, and he was just the kind who should. He seemed really artistic and original. He interested me because I think he was typical of the extraordinary revival of interest in architecture amongst intelligent people. His interest was entirely Georgian, as I think all sensible modern interest is, and his principal interest was Dutch architecture. If he had become an architect, and his compeer had remained outside the pale, it would be a good thing for themselves and for others.

I think I have said enough to illustrate my case, namely, that the currency of architecture is becoming hopelessly inflated. I have shown why I am not going to be an architect myself: (*a*) because the only type of architect who seems to flourish is the type I can never hope to be; (*b*) because far too many people of my own age are interested in the same thing, and it is the unfrequented path that leads to success. Now I can make a few prophecies, under the categories of pessimistic and optimistic.

It is quite certain, as no architect needs to be told, that architects in ten years' time will be in a terrible plight. There will not be enough clients to go round, and there will be a constantly increasing flood of young architects pushing their way in. The remedy does not lie in Parliamentary excommunication of all who do not bow the knee to the R.I.B.A.; the remedy is to turn all this tide of young blood into the channels which are at present monopolized by the speculative builders. If a thousand youthful enthusiasts could be impounded by the R.I.B.A. and made to repeat a creed of architecture, on the lines of the Communist Sunday Schools, to the effect that walls must be more than 9 in. thick, that windows must be painted white and divided into panes, that weather-boarding must be made of wood, and so on; if, then, these thousand could be dressed up as speculative builders and given a little capital, then I believe there would be an improvement in the appearance of the countryside. As for optimism, I believe that in ten or twenty years' time our eyes will be turned entirely towards Holland. We shall not be looking back, but evolving something clean and straightforward on the lines of Queen Anne's day, for although that monarch is notoriously dead, her architecture is most emphatically alive to this day.

The characters appearing in these articles are entirely imaginary, and are not intended to bear any resemblance to real persons, whether living or dead.

SIMPLE CURVES

[BY R, AUTHOR OF R'S METHODS]

THE DIRECTION OF FORM

SLOPES at 15° apart are found constantly in the direction and boundaries of the limbs in action of the human figure, in strong design, and again in the antique. An analysis of such a work as Watts's *Physical Energy* will show how often the 15° and 75° slopes occur in the action of the composition. Such investigation is most instructive, and when the constant use of these slopes is observed one feels strongly the necessity of becoming better acquainted with them. One cannot, in fact, be too familiar with these slope lines of 15° interval. If they are drawn as shown in figure one the angle

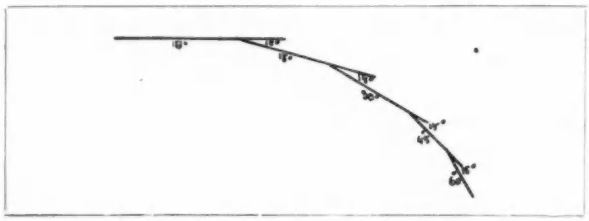


Figure one.

between the lines is 165°, and the remainder 15°, making up two right angles each time. After much practice in drawing these slopes with the 30°, 45° and 60° set-squares used together, it is very beneficial to practise drawing the slopes rapidly to a large scale on a blackboard or on paper. It is often helpful to overlap the lines. Grease paper is very cheap, very light, and can be bought everywhere; but newspaper, if drawn upon with a soft black pencil, is good enough for practice. By practice I mean drawing them time after time. When practice has been obtained in drawing the lines of the same length which give arcs of the circle, the lines should be drawn in some simple increasing or decreasing ratio: first with the set-squares, and then by eye to a larger scale. With practice several aids will present themselves. For instance, the first slope and the seventh slope (figure two) are at right angles, and

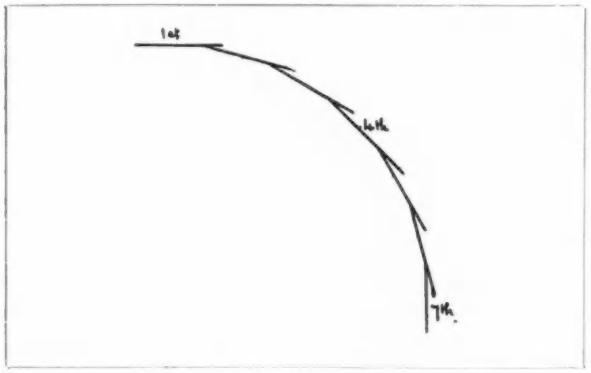


Figure two.

the intermediate, the fourth, is diagonal to them. Then there are two slopes between first and fourth, and two between fourth and seventh. When these slopes can be drawn with accuracy—at first starting with a horizontal or vertical—the exercise can be carried farther by starting with the 45° slope. Then the seventh will be at 45°, and the fourth either a horizontal or a vertical. The exercise can be carried farther still by starting at any angle.

Careful consideration and an analysis of the results obtained by the set-squares will soon show you basic laws for curvature, and impress them on your memory. For instance, in figure three double curvature is produced by leaving two alternate lines of the same slope (2 and 4); the curve going contrary ways from 3. Again, 1, 2, 3 are nearly the same length, so this curve is near a circle; 3, 4, 5, 6, 7, 8 decrease in length, therefore they suggest a more beautiful curve. This may give you a start in realizing the underlying mathematical truths that are the foundation of all curvature. Some find it helpful to put a piece of tracing paper over large-scale details, and approximately get the curvature shown

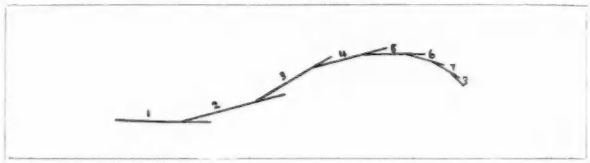


Figure three.

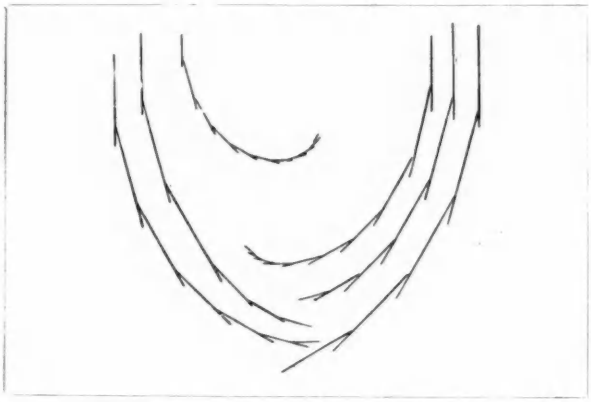


Figure four.

Figure five.

by these slopes at 15° apart. Sometimes one or two of the series are omitted instead of being drawn very small (see figures four, five, and six).

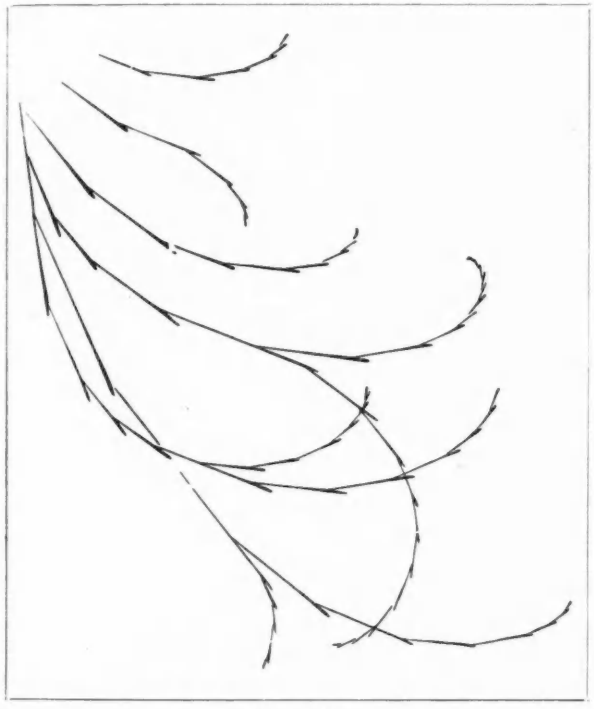


Figure six.

To draw egg forms (figure seven). The bottom part is a circle, therefore all the slope lines must be of the same length. In the top part the 60°, 75°, and 90° will be about the same length; then from 60°, a diminution towards small end, but as the end

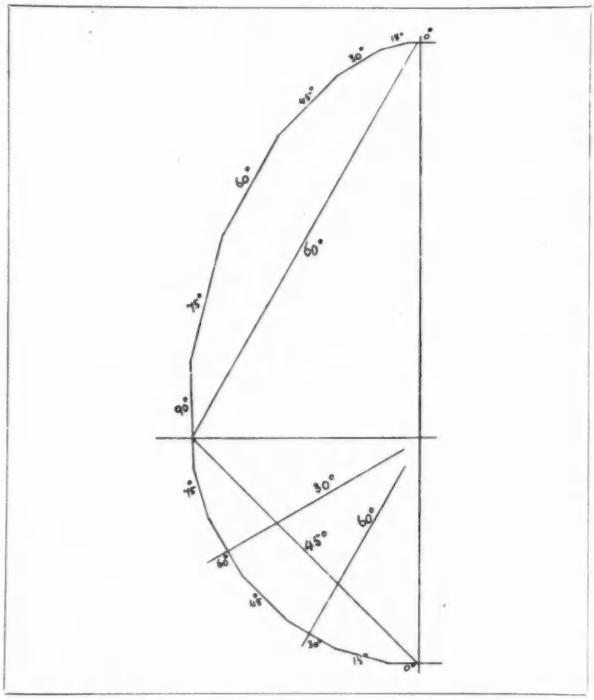


Figure seven.

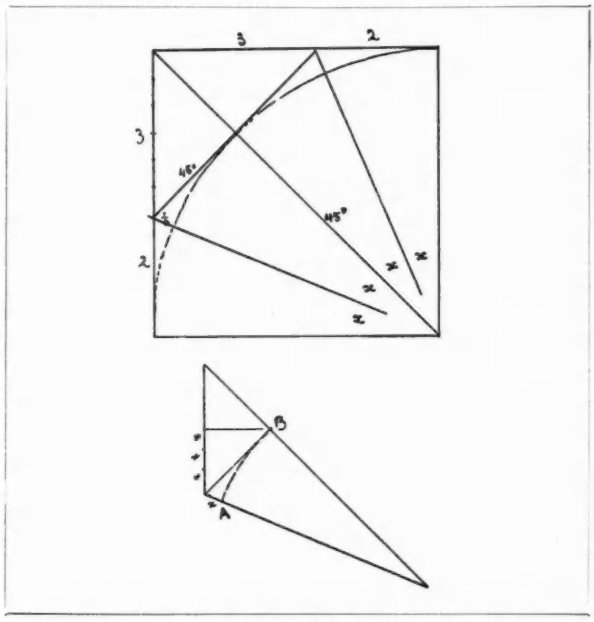


Figure eight.

is rather rounded, the third end slopes will be nearly the same length. To help with the circle I have used the 30° and 60° to divide into three parts, then divide each part into four equal parts, each slope taking two parts.

Perhaps the most simple way of learning to draw a circle by hand is: draw a square (figure eight); then bisect the right angle; then bisect each 45°; then draw the 45° tangent line.

A piece of paper doubled as shown in the lower illustration enables a circle of any size easily to be cut with a pair of scissors from A to B.

In drawing the 30° or 60° slope in a square (figure nine) the sides are divided into divisions of three and four.

In drawing 15° or 75° slopes in a square the sides are divided into ratio as shown in the lower illustration (figure nine).

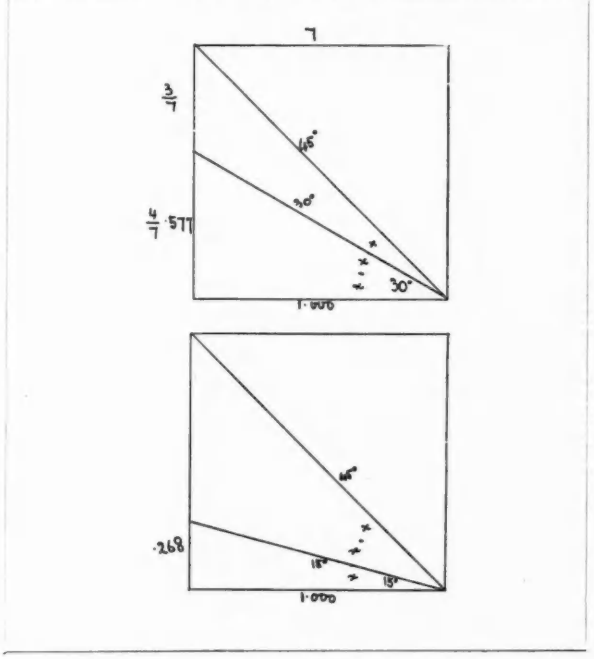


Figure nine.

CONSIDER THE FIREPLACE

[BY WILLIAM HARVEY]

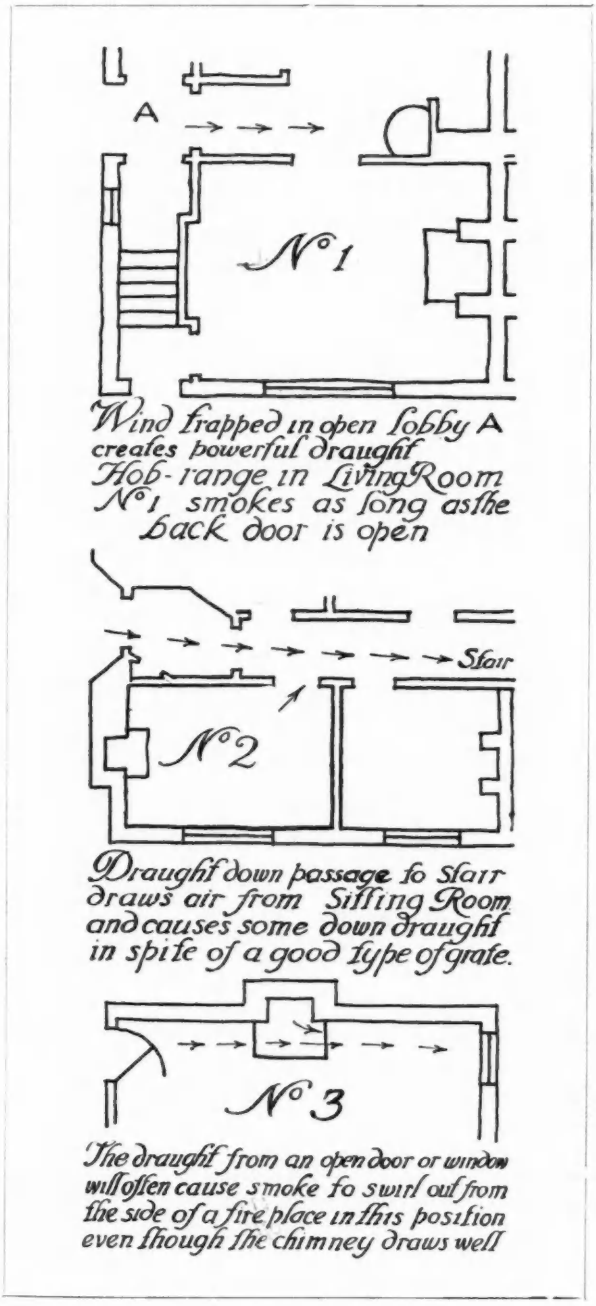
THE effect of planning upon the draught in the flue of an open fire is one of those mysterious subjects which require far more attention than is usually bestowed upon them during the period of an architect's training. Nothing causes more trouble to architect and client than a smoky chimney, yet many architects are forced to confess themselves ignorant of the rules of planning which should govern the supply of oxygen to the firegrate. And there is some excuse for ignorance on the subject. Winds are proverbially capricious, changeable, and uncertain, and to trace their course beforehand in reference to the lines of a newly-designed plan is a feat which makes demands upon imagination as well as experience. That it would be well to know in advance whether a chimney in a certain position will be liable to feeble updraught or to positive downdraught can hardly be doubted, for such knowledge would enable the architect to take special precautions in regard to the construction of the flue and the selection of a reliable type of grate or range, even if he did not go to the root of the matter and revise the plan so as to afford a better chance of a good draught. Unfortunately the study of the direction of draughts through buildings, and their effect upon fireplaces, is seriously complicated by the fact that allowance has to be made for the direction of the wind on the exterior of the building.

Air may be *drawn* to a point to which it will not permit itself to be *pushed*, and a change of wind from south-west to north-east does not imply a simple reversal in the direction of draughts through the house. The subject is complicated, too, by the fact that stoves and grates are not all of one uniform pattern and equally efficient in their power of burning fuel to practical purpose and assisting updraught in the flue.

The maker of highly efficient closed-in ranges, or of dwarf interior grates, cannot dictate to the architect the shapes of the chambers in which they shall be installed. He is frequently called upon to account for unsatisfactory conditions, but his attention is primarily directed to the discovery and cure of technical faults in the setting of his apparatus. In many cases the provision of a smooth intake from grate to chimney, the filling up of cracks by careless builders, or some such trivial amendment, cures the smoky chimney under normal conditions of wind, and the unpleasant subject is allowed to drop, without the share of bad planning having been inquired into; though, in reality, bad planning may have contributed something to the production of the nuisance as well as indifferent workmanship.

Normally, the provision of a vertical chimney-shaft implies an updraught of air even when no fire is alight. The draught is increased in vigour when the column of air is heated, and many fires which are satisfactory once they have been well-established, are horribly smoky when first kindled. The familiar, but dangerous, device of holding a newspaper to cover the space between the firebars and the top of the fireplace opening indicates the value of enclosing the fire-box and keeping the products of combustion to a single, well-defined track, in which they will not suffer from any admixture of cold air, or be blown out of their course by cross-currents of draught. A great many chimneys which are somewhat troublesome during certain winds can be very much improved by the provision of a metal canopy or blower to restrict the size of the fireplace opening, or by the use of closed stoves instead of open hob-ranges or dog-grates. Sometimes these substitutions are impracticable, and in a few instances the planning of the house is so defective as to make it a draught-producing machine with cross-currents of such vigour as to suck air or even hot smoke down a chimney.

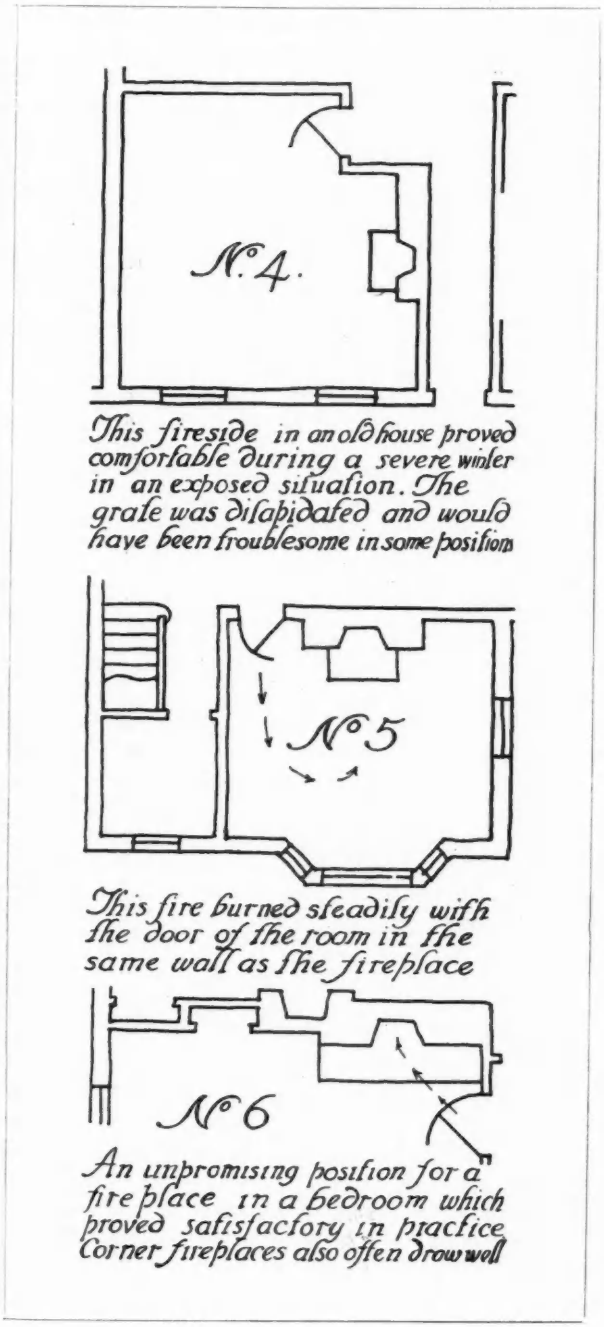
In one housing scheme a considerable number of workmen's dwellings were built to an approved standard plan in a somewhat exposed position, their ranges, of open-hob type, unanimously refused to draw, and when the fires were lit the houses regularly



Plans of three rooms known to contain smoky fires.

became filled with smoke. In this case the reduction of the size of the fireplace opening did not effect a complete cure, and the cause of trouble is still under examination, various forms of cowl and tallboy having been used without any marked improvement being obtained.

The conclusion arrived at by those investigating the circumstances of this mysterious case is that the room in which the hob-range is situated suffers from the rarefication of its air content through the influence of a vigorous current which rushes through the back lobby and is partially checked by keeping the back door shut. The case has additional interest from the fact that the presence of the draught from the back door was suspected as a cause of trouble from the nature of the plan, and was afterwards verified on the building. (Illustration No. 1.) A milder case of downdraught in a sitting-room flue was similarly traced to the suction of a draught passing the sitting-room door on its way down a long, narrow passage between the front hall and the staircase situated near the other end of the house. In this case a thoroughly reliable type of dwarf interior stove had been fitted, and the workmanship of the flue was most carefully executed.



Plans of three rooms having satisfactory firesides.

One factor which may aid the draught in the passage in its villainous work is the position of the chimney upon the outside wall of the house, but, other things being equal, the slight cooling down of the column of warm smoke from this cause should not suffice to create a downdraught in a well-made flue with a good grate at the bottom of it. The downdraught in this instance is not excessive, and is minimized by the householder's practice of using small pieces of dry, quick-burning wood as fuel. The builder and the manufacturer of stoves are both obviously free from blame; the design of the passage and the placing of the chimney on the exterior of the building both fall within the province of the architect. Even he will not be blamed, for the householder assumed the function of architect and designed the building! (Illustration No. 2.)

How the draught down a long, straight passage will abstract air from a room and create a partial vacuum in front of the fireplace will be understood by readers who have used a spray-producer in applying fixative to a pencil or crayon drawing, or have used some of the newer antiseptic sprays introduced in the campaign against the housefly. These ingeniously devised spray-producers show how a current of air in a tube can even draw a liquid out of a bottle and project it in the direction of the current. The architect must see to it that his plan does not resemble the spray-producer in its power of abstracting air away from the fires. He must also arrange for the air to be brought to them in a manner that makes for steady combustion of fuel without destroying the comfort of those who have to live in the house.

The positions of the doors and windows naturally affect this problem, and the manner of their opening is also important. Doors which allow a blast of air to rush across the face of the fireplace are almost invariably a cause of trouble, the worst position for the door being the near corner of the wall at right angles to that in which the fireplace is situated. (Illustrations Nos. 3 and 6.) The adjoining position for the door in the corner of the same wall which contains the fireplace is probably the best position, if the wall is long enough to allow of space for chairs around the fire. (Illustration No. 5.) A doorway projected into the room in a sort of internal porch provides a delightful ingle beside the fire, and the turn of the passage made necessary to form the porch helps to baffle and break up the suction-creating draughts. (Illustration No. 4.)

Windows which open down to the ground share the characteristic properties of doors, and, as a rule, windows which admit air at a level of 6 ft. 6 in. above the floor should be installed in addition for use in times of emergency, when gales are blowing and the French door is kept as tightly bolted as possible.

The diagrams illustrating this article are drawn as the result of personal investigation and experience, but the reader will do well to test experimentally the rival merits of different positions of doors and windows in houses to which he has access. Really good types of grate and range, properly connected to flues of even and smooth bore, may burn well even under bad conditions, but hob-grates and dog-grates demand special consideration in the planning. Fires sunk in the wall without projecting chimney breasts are also peculiarly liable to be disturbed by cross-currents of air, and where chimney breasts have to be omitted, it is advisable to recess the fire somewhat in the thickness of the wall. A sinking is even more effective than a projection in directing the air into the fire from the front, but the projecting sides of the chimney breast are better than nothing in baffling a cross-draught from a badly-placed door.

IN PARLIAMENT

[BY OUR PARLIAMENTARY REPRESENTATIVE]

Sir Clement Kinloch-Cooke moved the second reading of the Architects' Registration Bill. He said that the measure was promoted by the Royal Institute of British Architects, under whose auspices various educational agencies were in operation. He explained that at present a qualified architect, however hard he might work and however successful he might be in his profession, had to share the title of architect equally with the person who had no architectural training. Voluntary registration now existed, but that did not go far enough, it did not carry with it statutory authority. What was wanted was compulsory registration for all persons wishing to be officially registered as architects. The Bill provided that any person desiring to practise as an architect should be required to furnish himself with credentials showing that he had received the necessary training and passed the necessary examination. This would give security to the public against unqualified persons, and would also protect the qualified against the unqualified practitioner. Great Britain was one of the few remaining countries in which architects were not required to possess a statutory qualification. The Bill would help to secure the preservation of our countryside and prevent the erection of inartistic and badly-constructed buildings. He expressed complete willingness to consider any amendments in committee.

Colonel T. More seconded, and pointed out that while great beauty of design and construction existed in our buildings on the one hand, on the other there was intolerable and unutterable ugliness. The Bill would do away with "quack jerry-builders" calling themselves architects, and would give the country a profession of expert enthusiasts, who would bring pleasure and graciousness to the construction of even a two-roomed house. It would develop the profession into a community of practical idealists, who would gradually transform our thoroughfares and the countryside.

Mr. A. Alexander, a Labour member, who moved the rejection of the Bill, declared that the practice was growing of producing measures that provided for the formation of new close corporations. If the precedent of the medical profession was to be followed by every other type of profession it would soon be impossible for boys and girls of the working class to find a broad highway into the occupations which should be open to them. He was not against raising the standard of the profession, but he was interested in keeping the avenue to it open to the working class.

Colonel Wedgwood, who seconded the rejection, said it was not in the general interest that all professions should become close co-operations. If the expense of architectural service was increased, fewer architects would be employed, and more houses would be built without any pretensions to beauty, simply by the "ribbon" builder.

In the debate which followed, Sir Alfred Hopkinson welcomed those provisions of the Bill which would lead to the encouragement of architectural education, but he strongly objected to the clauses dealing with unregistered architects, as an interference with the liberty of the subject. Some of the most horrible buildings in the world had been put up by architects, and by most distinguished architects. "If you want a thing badly done, commend me to a committee of distinguished architects," he added amid laughter.

Major Hills ridiculed the idea that the best art could be obtained by registration. He said that Wren was never an architect, but a mathematician and professor of science, and would not have been allowed to practise had the R.I.B.A. been in existence in his day. Art would not flourish in chains. Registration would rule out the best talent of the time. Unless the clauses against unregistered architects were struck out he should continue to oppose the Bill at every stage.

Support from the Labour benches came from Mr. J. Gardner, who denied that the R.I.B.A. was trying to create a close corporation. There was nothing in the Bill to prevent a working man from becoming an architect.

Sir George Berry was in favour of education leading to registration for architects.

Major Tasker said that all architects supported the principle of registration, but the difficulty was to define what was registration. The great architects were not men who had passed examinations. One of the most remarkable buildings in London, the Roman Catholic Cathedral at Westminster, was designed by a clerk of works who had passed no examination. Men of genius would be shut out by the proposed examination papers. People were more interested in the architecture of Leicester Square than in some of the buildings of the ancient Roman Empire. (Laughter.)

The promoters of the Bill expressed readiness to meet all objections in committee, but Sir W. Joynson-Hicks, the Home Secretary, urged the House to give the Bill a second reading and then refer it to a select committee, where all the technical details could be much better thrashed out than they could be in an ordinary standing committee of the House.

On this the motion for the rejection was withdrawn, the Bill was read a second time, and referred to a select committee.

The Landlord and Tenant (No. 2) Bill, which contains the Government's proposals for leasehold reform, has been read a second time by 240 votes to 83.

LAW REPORTS

ARBITRATOR: CASE STATED: PRELIMINARY OBJECTION TO APPEAL

Re *an Arbitration between Northwood and others* v. *London County Council. Court of Appeal. Before Lords Justices Bankes and Sargant, and Mr. Justice Avory*

This matter came before the Court on an appeal by Northwood from a judgment of a King's Bench Divisional Court, consisting of Justices Salter and Talbot, on an application to set aside the award of an arbitrator, or, alternatively, a portion of it on the ground that it was bad in law on the face of it. At the hearing before that Divisional Court the London County Council argued that the Court had no jurisdiction to entertain the motion to set aside the award, because the decision of the High Court on any case stated by an arbitrator was, by section 6 (2) of the Acquisition of Land (Assessment of Compensation) Act, 1919, made final and conclusive. The decision of the High Court referred to was given on May 21, 1926, by another Divisional Court (Lord Hewart, C.J., and Mr. Justice Salter and Mr. Justice Branson) which the arbitrator incorporated in his final award and from which the appeal was made. The Divisional Court (Mr. Justice Salter and Mr. Justice Talbot) dismissed the application, and the claimants appealed to the Court of Appeal. An official arbitrator (Sir Anker Simmons, K.B.E.) had stated a case in respect of an improvement scheme made under part II of the Housing of the Working Classes Act, 1890. The main question which had to be dealt with was whether the official arbitrator was entitled to take into account the fact that certain premises were fully licensed and to award compensation.

Mr. Macmorran, K.C., and Mr. H. G. Robertson appeared for the appellants, and Mr. Montgomery, K.C., and Mr. W. Allen for the County Council.

Mr. Montgomery raised a preliminary objection that no appeal lay by reason of the provisions of section 6 (2) of the Act of 1919.

Mr. Macmorran argued that the decision appealed against was not a decision within the scope and meaning of the section, and could therefore be appealed from.

The Court held that the preliminary objection succeeded, and the appeal was dismissed.

Lord Justice Bankes, in giving judgment, said that it seemed to him to be a plain point which arose upon the construction of section 6 (1) of the Acquisition of Land (Assessment of Compensation) Act, 1919. The appellants were the owners of property which had been scheduled under a housing scheme. A claim was made for compensation, and was referred to arbitration. A

special case was there stated by the arbitrator in accordance with the provisions of section 6 (1) of the above Act. The matter then came before a Divisional Court, and upon all the points submitted to them by the arbitrator the Court gave answers against the view contended for by the appellants. The arbitrator then proceeded to make a final award in a form which incorporated as part of the award both the special case and the decision of the Divisional Court. That gave the appellants the opportunity of saying that, although they could not appeal directly because of the provisions of section 6 (2) of the Act, yet it was open to them to contend that, as the award was bad in that form because the decision of the Divisional Court was wrong, an appeal had become possible. To that an objection had been taken that the Court of Appeal had no jurisdiction to hear an appeal by reason of section 6 (2) of the Act, which provided: "The decision of the High Court upon any case so stated shall be final and conclusive, and shall not be subject to appeal to any other Court." And the point was therefore taken that the decision of the Divisional Court in the present case upon the special case, whether stated in answer to a question put to the Court in a consultative case or in a case stated under section 6(1) of the Act of 1919, was final and conclusive. The House of Lords had decided in the case of the British Westinghouse Electric, etc., Co., Ltd. *v.* Underground Electric Railways of London, Ltd., that where an award which was expressed to be made as incorporating an opinion of the Court on a question of law, and a motion had been made to set the award aside as containing an error of law on the face of it, the Court had jurisdiction to set aside the award. The appellants attempted to apply that principle in this case. They persuaded the arbitrator to embody in his award the decision of the High Court, and then argued that the whole award was bad on the face of it. But the two cases were not in the same category. Where there was a provision such as section 6 (2) of the Act of 1919, which, in the plainest terms, made the decision of the Court, in whatever form it might be, upon a special case stated under that section final and conclusive it seemed to him to be impossible to get round the words of that subsection. The preliminary objection therefore succeeded.

Lord Justice Sargant and Mr. Justice Avory agreed.

QUIET ENJOYMENT: POSSESSION: PUBLIC IMPROVEMENT

Clark v. *Corporation of Newark. Chancery Division. Before Mr. Justice Clauson*

This was an action in which his lordship took the view that the plaintiff was holding up a public improvement, without regard to the convenience of the public and his fellow-citizens. The plaintiff, Mr. Fredk. Clark, a saddler, of London Road, Newark, sought a declaration from the Court that he was a yearly tenant of the Newark Corporation, and he also sought an injunction to restrain them from interfering with his quiet enjoyment. He also asked for damages. The Corporation said the plaintiff was a quarterly tenant, and the County Court judge and the King's Bench Divisional Court had so held. The Corporation had acquired the freehold of the house and needed it for street improvements. The other tenants in the road had vacated their houses, and the plaintiff was holding up the improvement. The plaintiff, in reply, said the Corporation had received rent after the County Court judge had given them possession, and that act created a new tenancy.

Mr. Mulligan appeared for the plaintiff, and Mr. Sandilands for the Corporation.

Plaintiff gave evidence in support of his claim for damages, and stated that his house suffered from the demolition of the houses around it.

The borough surveyor, Mr. J. H. Clarke, stated that special arrangements were made for demolition around the plaintiff's house, because his wall leaned on another and was not bonded to it. A few bricks had fallen on a lean-to shed and a skylight was damaged.

Mr. A. E. Easel, F.R.I.B.A. (Messrs. Easel, Sons and Knight, Newark), also gave evidence, and stated that the demolition offered no substantial physical interference with the plaintiff or his house.

His lordship held that the tenancy was not an annual one, and he refused the plaintiff an injunction. Plaintiff thought the Corporation should have given him compensation, but they were entitled to exercise their rights as landlords. He gave the Corporation possession of the house as and from April 6, with mesne profits for a year to that date. With regard to damages he awarded the plaintiff £18. His lordship added that it was obvious that the plaintiff was holding up a public improvement, and seemed disposed to stay in the house as long as possible, without regard to the convenience of the public or his fellow-citizens.

CORRESPONDENCE

THE D.I.A. AND SOME FALLACIES

"*Accordingly, that beautiful boat-like lift of the front of the wagon was carefully prepared on the saw-pit, not for beauty, but for use.*"

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Before unkindly charging the Design and Industries Association with "atrocious and confusing fallacies" the writer of "The D.I.A. and some Fallacies," in your JOURNAL for March 30, should have studied the aims of this Association more carefully, and, if he claims to be one of the world's adequate clear thinkers, should have thought more clearly. He starts with the strange inversion of the D.I.A.'s aim, that its endeavour is to inculcate the desirability of making articles of everyday use beautiful. On the contrary, the function of the D.I.A. is to combat the error that the first consideration in a designer's mind should be "how can I make this thing beautiful," while the consideration of "how can I make it perfectly serve its purpose" is of secondary importance. Why is this the aim of the D.I.A.? Because they recognize that the vague "wooing of 'beauty,' for her fair self" (as this writer puts it) had led designers and craftsmen to neglect the practical purpose of their productions, so missing not only utility but beauty as well. Hence the motto "Fitness for Purpose," and our refusal to admit that beauty, like rouge and powder, can be added to an unserviceable article by the application of surface ornament or by perverting simple structure into unnatural bulges, curves, and taperings. Indeed, we logically go farther and deny that extrinsic design and imperfect planning are beautiful if, for the sake of wooing "beauty," they weaken structure, impair utility, and add irrelevant complications of care and maintenance. In the same way one would deny beauty to prose which for the sake of picturesqueness employs rhetoric. The D.I.A. would not claim that everything fit for purpose is beautiful; but it definitely asserts that whatever impairs efficiency is unlovely.

The writer of the article on D.I.A. "fallacies" observes that "a little clear thinking will show that beauty has no more to do with efficiency and fitness than it had to do with morality and obedience." We cannot stop to ask is he really sure that the most beautiful art has not come from men of intense faith and devotion to an ideal. But we may suggest that rather more clear thinking will indicate that beauty and efficiency are usually dependent and inseparable. What about a yacht, a wagon, a falcon or a butterfly? Who thinking even moderately clearly will deny that their beauty is the direct product of their supreme efficiency? And taking up this writer's test case of a chair, made of good material, in the best possible way, with perfect proportion, comfort, and balance, the heavy odds are that as chairs go it will be beautiful. By the time, however, that it has been "embellished" with curves and grooves and polish it will most likely be deflowered. The writer of the article in question thinks that beauty is added in this way; we know that to the trained and seeing eye it is sapped whenever the inevitable lines of true and needed structure are "improved" and wherever simplicity is glossed by unnecessary ornament. The writer asks, "Is a plate more

efficient and fitter for its purpose because it has a design on it?" The answer is that without the guide of fitness for purpose it will be both less efficient and less beautiful than an unadorned plate, and the same applies to a "fluted, cut or otherwise ornamented tumbler."

Lastly, we come to this. "There is the implied supposition that there is something sacred and absolute in man's treatment of materials, whereas history shows that his natural advancement synchronizes with, and is often dependent upon, his increasing ability to render materials subservient to his will." What your writer probably means is "sacred and absolute *in the nature of materials*." Of course there is; and the history of every art conclusively shows that whenever designers and craftsmen ignored the nature of their material—stone, clay, glass, silver, bronze or paint—a disastrous decadence ensued. It is one thing to use a material, or a horse, and quite another to abuse it.

C. H. COLLINS BAKER

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I think you are a little severe on the D.I.A. in describing its slogan "Fitness for purpose" as a fallacy. It only becomes a fallacy when it claims to be the whole of the Law and the Prophets—the Omega as well as the Alpha of Art. It still remains the best and surest foundation for the modest designer. In the mental processes of design one is necessarily obliged to deal first with practical purpose. That is fundamental. Beauty arrives like an electric spark when practical function makes contact with an artistic ideal. To vary the metaphor, without mixing it, the two birds must be brought down with the same stone; and while there is something to be said for taking a shot at utility alone, we court failure if our aim is at beauty alone. In the same way beauty has its relation to ethics, and we need only begin to talk about fallacies when that relation is pressed too far.

Innumerable examples could be cited in illustration of this principle, both in the creations of Nature and of Man. In the former, fitness for purpose rules everywhere. The eye would be nothing without the practical function of sight and the arm nothing without might. In the latter, it is a little exasperating to the modern designer to consider the opportunities that the earlier stages of civilization afforded for the union of use with beauty. To name but one of these—the moat which surrounded the old house like the setting of a jewel was clearly a practical and necessary expedient for defence and yet how beautiful too! To do likewise now without the practical motive would be merely an affectation.

One cannot escape from the conclusion that beauty is inextricably interwoven with utility, and the slogan of the D.I.A. may well be justified within its proper limits.

M. H. BAILLIE SCOTT

COMPETITION CALENDAR

The conditions of the following competitions have been received by the R.I.B.A.

April 30. Town Hall and Library, Leith. Assessor, Sir George Washington Browne, P.R.S.A. Four premiums are offered. Particulars and a plan of the site will be supplied to competitors on payment of a fee of two guineas, which will be returned on receipt of a design in accordance with the conditions. Should architects on receipt of the particulars not desire to compete, the deposit will be refunded provided the papers are returned within four weeks. Inquiries to be addressed to Mr. A. Grierson, Town Clerk, City Chambers, Edinburgh.

May 31. New school for 1,000 boys for the Governors of the Bradford Grammar School. Premiums, £300, £200, and £100. Assessor, Mr. Arnold Mitchell, F.R.I.B.A. Particulars and plan of site from Mr. W. Brear, Secretary, Grammar School, Bradford, Yorks. Deposit £1 1s.

June 15. Shakespeare National Memorial Theatre, Stratford-upon-Avon. The competition is open to architects of the British Isles and America. It will be in two sections—a preliminary competition for sketch design only, from which six designs will be selected by the assessors; each of the selected competitors will be paid £100 premium towards the cost of preparing a further more detailed design, which will form the second half of the competition. The selected architect will be paid in accordance with the Schedule of Charges sanctioned by the R.I.B.A. Assessors, Mr. E. Guy Dawber, P.R.I.B.A., and Mr. Cass Gilbert, who will both act in an honorary capacity, and Mr. Robert Atkinson, F.R.I.B.A. Particulars, with site plan, etc., from the Secretary, Shakespeare Memorial Theatre, Stratford-upon-Avon. Deposit £1 1s., which will be refunded should the conditions be returned within one month.

June 30. Designs for the planning of the Civic Centre, Birmingham. Assessor, Mr. H. V. Lanchester, F.R.I.B.A. Premium of £1,000 to the design placed first, and a further sum not exceeding £1,000 divided between the authors of other approved designs. Particulars from Mr. Herbert H. Humphries, M.INST.C.E., City Engineer and Surveyor. Deposit £1 1s., which will be returned after the receipt of a design or the return of the documents supplied.

July 1. The Reading Corporation invite architects residing or practising in Berkshire, Buckinghamshire, or Oxfordshire, to submit, in open competition, designs for a chapel which it is proposed to erect in a new cemetery. A premium of 50 guineas will be awarded to the author of the design placed first by the assessor, Mr. Charles J. Blomfield, F.R.I.B.A., and twenty-five guineas to the author of the design placed second. Particulars, after May 1, from the Borough Surveyor, Town Hall, Reading. Deposit £2 2s., which will be returned after receipt of a *bona fide* design. Should architects, on receipt of the particulars, not desire to compete, the deposits will be repaid provided the papers are returned within four weeks. Designs in sealed packages, endorsed "Design for Chapel," to Mr. Charles J. Blomfield, F.R.I.B.A., 13 Ashburn Gardens, London, S.W.7.

The conditions of the following competition have not as yet been brought to the notice of the R.I.B.A.

April 30. Designs for a memorial to be erected in the public recreation ground at Merthyr Vale. Cost of the design, materials, and erection of the superstructure not to exceed the sum of £500. The foundation and laying-out of site will be undertaken by the Committee. Only the accepted design will be paid for, and the Committee does not bind itself to accept any design. Designs with plans and specifications to Mr. E. L. Jones, Hon. Sec., Aeronfa, Merthyr Vale, Merthyr Tydvil.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL by our own patent expert. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.1. The price is 1s. each.]

LATEST PATENT APPLICATIONS

8088. Ackermann, H. Mould boxes for brick, etc., presses. March 24.
8254. Andress, A. Burning cement, lime, etc. March 25.
8096. Bentley, J. Device for securing parts of plaster moulds. March 24.
8317. Cornish, P. Water-tight doors, etc. March 26.
8274. Gavin, W. A. J. Concrete-mixing machines. March 25.

SPECIFICATIONS PUBLISHED

267579. Bubla, K. Apparatus for impregnating wood.
259896. Granier, O. Apparatus for spraying mortar-like substances.
267642. Illeman, R. Manufacture of pipes and other hollow bodies from concrete and a bituminous composition.
267660. Walmsley, J. Apparatus for feeding powdered fuel to continuous brick kilns.
267680. Brooke, E. D., and Wood, W. Windows, doors, and the like.

ABSTRACT PUBLISHED

265245. Southern, J. H., and Hill & Co., Ltd., R. Reinforcements for concrete.

TRADE NOTES

The motor travelling exhibit of the National Radiator Co., Ltd., has left Hull for a tour which will extend until after the middle of October. Demonstrations have already been given at Bridlington, Filey, and Scarborough. Whitby will be visited on April 20 and 21. The subsequent programme of the tour will include the principal towns in Durham, Newcastle, the West Riding of Yorkshire, the Lincolnshire County Agricultural Show, the Midlands, Royal Lancashire Agricultural Show, the principal towns and cities in Lancashire, including Manchester and Liverpool, and the North Wales coast.

A marked advance in the manufacture of priming coats was brought to the notice of representatives of the technical Press at a demonstration which took place at Messrs. Robt. Ingham Clark & Co.'s works at West Ham Abbey. The speciality in question—which is a transparent pigmented first coating known as " Filcote "—can be brushed or sprayed. It is prepared from varnish and paint ingredients, is very elastic in character, and is non-penetrative in a very high degree. As regards this latter property, experiments convincingly showed that when applied to such varying surfaces as wood, Keene's cement, and blotting paper, its absorption by these materials was negligible by comparison with that of an ordinary high-grade priming coat. " Filcote " has excellent gripping qualities and thus provides a safe key for subsequent painting. A further advantage is that it can be mixed with an undercoating. The manufacturers claim that the use of this non-absorbent priming often saves a coat of paint or varnish. In these days of high building costs, this is a point which well merits the attention of architects.

The main front in Fleet Street, London, of the new offices of the *Glasgow Herald*, the *Bulletin*, and the *Evening Times* group of Scottish newspapers was specially designed by Messrs. Percy Tubbs, Son and Duncan, the architects, so that it could be effectually illuminated by floodlighting. The floodlighting installation consists of projectors and Mazda lamps supplied by The British Thomson-Houston Co., Ltd. For illuminating the upper portion of the building six B.T.H. type 795 floodlight projectors are used each fitted with a Mazda 250-watt lamp. These projectors are concealed behind a specially constructed ornamental stone coping. The lower section of the building is illuminated by two B.T.H. type 793 floodlight projectors each with a Mazda 1,000-watt lamp, and two B.T.H. type 795 projectors each with a Mazda 250-watt lamp. The two larger projectors are enclosed in ornamental bronze brackets and the two small ones are concealed by means of small bronze screens. The building was illustrated in our last issue. The equipment of the interior consists of standard B.T.H. enclosed fittings, together with a number of special bronze and wood fittings designed by Mr. Duncan. The whole of these fittings were supplied by The British Thomson-Houston Co., Ltd., and the electrical contractors responsible for the installation were Messrs. Frederick McGhee & Co.

THE NEW PAVILION, HASTINGS

Following are the names of the specialists and contractors for the White Rock Pavilion, Hastings, illustrated on pages 547 to 556. Structural engineer, Dr. Oscar Faber, O.B.E.; acoustic adviser, Hope Bagenal, A.R.I.B.A. General contractors: Simms, Sons and Cooke, Ltd., Nottingham, who were also responsible for the demolition, excavation, and foundations; clerk of works, W. E. J. Budgen. Sub-contractors: Lawford, Ltd., dampcourses and asphalt; Art Pavements and Decorations, Ltd., marble; Malcolm Macleod, Ltd., artificial stone; A. D. Dawnay and Sons, structural steel; Stirling and Johnson, Ltd., tiles; Jeffreys, Ltd., ventilation and central heating; Sturtevant Engineering Co., Ltd., vacuum cleaning; Grierson, Ltd., electric installation; Heal and Son, electric light fittings, etc.; Burn Bros., Ltd., drainage; H. Pontifex and Sons, sanitary fittings; Welstead, Ltd., steel casements and window furniture; De Jong & Co., Ltd., plaster and decorative plaster; Bainbridge Reynolds, Ltd., Comyn Ching & Co., Ltd., and Bloxam and Scuffells, Ltd., metalwork; Plummer Roddis, Ltd., carpets; Martin Bros., Ltd., curtains; W. W. Turner & Co., Ltd., seating; Hammond and Champness, Ltd., lifts.

CIMENT FONDU—ITS RELATION TO ECONOMICAL CONSTRUCTION

An address was delivered by Mr. J. G. Kay, A.M.I.N.A., M.I.STRUCT.E., to the members of the Birmingham Architectural Association upon the relation of Ciment Fondu to economical construction. He said he thought it was safe to assume that, within the last fifty years, no architect had ever designed a building nor engineer a structure, no contractor had accepted a contract, no suppliers of material have supplied their material, without having all had to answer the same question: How soon ? All other things being equal, the man who could give the service of more rapid delivery probably got the job.

A quickly completed job earned revenue for its owner at an earlier date, reduced the contractor's overhead charges on the job, and probably earned him extra remuneration and, of course, redounded to the credit of the architect. Such was the reason why Ciment Fondu was attaining such popularity.

There was not a specification in existence which did not compel the contractor to leave shuttering in place for so many days; in other words, which compelled the contractor to waste time and add to his costs by immobilizing his timber shuttering.

Twenty-four hours was all that Ciment Fondu asked for, whatsoever the stress it was called upon to withstand.

The inception of Ciment Fondu dated back to the time of the construction of the Suez Canal, which was something over sixty years ago. All the hydraulic lime used in the construction of the Suez Canal was supplied by Messrs. Pavin de Lafarge, because the hydraulic lime made by that firm possessed a quality for resisting attack by sea-water which other limes at that time did not possess. Even at that time Lafarge had been investigating the disintegration of hydraulic limes by sea-water for some years.

In 1908 some excellent batches of Ciment Fondu were made, but other batches fell to pieces, and the investigators could not discover why. Research continued without ceasing from 1908 to 1913, when the cause of the trouble was discovered. Different batches of identical analysis had been hitherto sometimes stable and sometimes unstable. As soon as the cause of this instability was discovered it was quite simple to put matters right and control it.

In view of the fact that so much trouble had occurred prior to 1913, the company decided not to say anything about the new discovery for a period of five years, in order to be quite sure that the troubles had really been overcome, and that the strength continued to increase rather than fall back. In addition to their own private tests, the French Government authorities, the Ponts and Chaussées, were asked to put in hand long duration tests. As, in 1918, these five-year tests showed that the progression was quite definite, the material was then placed on the market in France, although, by special arrangement, the company did manufacture about 5,000 tons in 1916 for some special work for the Paris, Lyons and Mediterranean Railway.

In concluding, he said that he trusted he had been able to show that Ciment Fondu concrete was just as durable as the stone it was intended to replace. It was immensely strong; it was extremely rapid in its action, though very slow in set; it was immensely tenacious to both reinforcement and aggregate; it was very impervious to the passage of water; it was fire-proof to a remarkable degree; it was frost-proof to a remarkable degree; and last, but not least, owing to the entire absence of free lime, it was unaffected by sulphates, sugar, beer, sea-water, and a hundred other things.

He hoped also that he had not given the impression that Ciment Fondu was new to users in Great Britain. Since it was introduced in 1923, it had been used on thousands and thousands of jobs all over the country. If they referred to any of these users they would find them not merely satisfied but enthusiastic.

THE WEEK'S BUILDING NEWS

Plans passed by the BOLTON Corporation: rebuilding house, Bridgeman Place, for Messrs. Thomas Turner and Sons; alterations, "Three Pigeons," Wigan Road, for Messrs. J. Jackson and Son, Ltd.; extension to shed, Lincoln Mills, for Messrs. R. Entwistle & Co., Ltd.; alteration to shop premises, Oxford Street and Old Street, for Messrs. Whitakers (Bolton), Ltd.; twelve houses, Crescent Road, for Mr. Wilfred Andrew; eight houses, Manningham Road, for Mr. Aaron Greenhalgh; sixteen houses off Bradford Road, for Mr. Thomas Blakley; two houses, Lonsdale Road, for Mr. Joseph Uttley; six houses, Kirk Street, for Public Health Committee; nine houses, Gilbert Street, for Messrs. Jabez Johnson, Hodgkinson and Pearson, Ltd.; lay-out plan, Chorley Old Road, for Lady Beaumont; six houses, Chorley Old Road, for Mr. W. L. Newsome; twelve houses, Thornton Avenue, for Mr. F. E. Thornton; forty houses, Castlewood Square, for Messrs. Leigh Bros., Ltd.; additions to laundry, St. Joseph's Convent, Deane, for the Rev. Mother-General; extension to card-shed, Settle Street, for The Ocean Spinning Co., Ltd.; extension to callender-room, Temple Bleach Works, for Messrs. T. Cross & Co., Ltd.; twenty-six lock-up garages, Park Road, for Mr. Wilfred Andrew; offices and transformer house, Moss Lane Colliery, Darcy Lever, for Messrs. S. Scowcroft and Sons, Ltd.; twenty-six lock-up garages, off Bradford Street, for Messrs. Edwards Bros.; extension to workshop, Newton Street, for Mr. Robert Wood; four houses, Sharples Avenue, for Mr. Arthur Price; lavatory accommodation, Belmont Road, for trustees of Wilkinson Sanatorium.

*

A largely attended conference was held in Aberdeen Town Hall to consider the question of urging the Government to construct a new mid-Scotland road through Glenfeshie, connecting the valleys of the Dee and Spey, and going by Braemar and the Linn o' Dee. It was unanimously agreed, subject to the approval of ABERDEEN Town and County Councils, to send a deputation to the Secretary of State for Scotland requesting the Government to undertake the construction and maintenance of the proposed road.

*

The EPSOM Rural District Council is applying to the Minister of Health for approval of a scheme for the erection of a further 256 cottages in their district.

*

The Minister of Health has approved the proposed erection of 100 houses on sites to be determined at CHERTSEY.

*

A new school for tuberculous children is to be built in Fort Road, BERMONDSEY.

By the Byfleet Housing Sub-committee, the CHERTSEY Rural District Council was recommended to build further houses at Byfleet and Pyrford.

*

A proposed reconstruction of TWICKENHAM Station involves widening to 50 ft. the London Road bridge.

*

Work is to be begun on the building of a new theatre to be known as "The Piccadilly," at the corner of Denman Street and Sherwood Street, LONDON. Mr. Edward Laurillard is responsible for the venture, and the negotiations for the site have just been completed. The building is estimated to cost £200,000.

*

For the purpose of meeting building developments and preventing floods the BIRMINGHAM Corporation is seeking sanction to a loan of £313,100 for sewer extensions and reconstructions.

*

The HONITON Rural District Council, Devon, has received sanction from the Ministry of Health to the erection of eighty-two houses in various parishes.

*

Consent of the Ministry of Health has been received by the OSWESTRY Town Council for the erection of twenty-six houses of the non-parlour type.

*

The L.C.C. is carrying out a £500,000 road improvement near SHOREDITCH Church to obliterate the bottle-necks of Old Street and Kingsland Road. The improvements involve the reconstruction of Shoreditch Station (L.M.S.) and two railway bridges.

*

A scheme for the development of PORTHCAWL as a popular seaside resort is projected. It is reported that a private corporation has acquired about 250 acres of sand dunes, and the lay-out will be in accordance with modern town-planning ideas. It is proposed to erect a concrete promenade, a mile and a-half in length, providing a road 100 ft. wide, which will connect Newton Beach to Sandy Bay with the eastern promenade. The whole of the frontage will be restricted to hotels, boarding houses, and private residences, and behind this there will be a shopping and entertainment avenue.

*

The Ministry of Health has written sanctioning the borrowing by the CAMBORNE Council of £925 for the purchase of land opposite Camborne Rectory for the housing scheme: £21,425 to meet the expenditure incurred in the erection of the houses, £2,000 for road work, and £650 for sewers.

Formal sanction has been received for loans of £5,030 and £850 for the construction of streets and sewers on the Lesney Farm site by the ERITH Urban District Council.

*

Recommendations that the City Council apply to the Ministry of Health for sanction to borrow £45,000 is to be made by the Paving Committee to MANCHESTER City Council. The money is for widening, strengthening, and constructing bridges.

*

A proposal to repair and recondition Queen's Buildings, Birkenhead, generally known as the Dock Cottages, at a total cost of £36,517 is being considered by the BIRKENHEAD Town Council.

*

At the monthly meeting of the BALLYMENA Rural District Council a proposal to erect an additional 193 houses was put forward.

*

The BLACKPOOL Town Council is considering plans for the lay-out of estates belonging to the Corporation, adjoining the new promenade at South Shire. The plans provide for an island site on the sea side of the promenade immediately opposite Harronside Road, whereon it is suggested that an hotel or hydro be built leaving a 60 ft. road on each side of the building to the sea.

*

On behalf of Mr. C. J. Daniels, Mr. Howard Hill, architect, has in view a scheme for the erection of an amusement and dancing pavilion on the reclaimed land on the south foreshore, SOUTH SHIELDS.

*

Messrs. Nalder and Collyer's Brewery Co., Ltd., are to rebuild the "New Inn" on another site at South End, CROYDON.

*

The CROYDON Corporation is acquiring a site in County Road, Norbury, for the erection of sixteen houses.

*

Mr. Henry Bodin, of Cricklewood, is purchasing a building site at the corner of Denning Avenue and Purley Way, CROYDON.

*

Messrs. G. and C. A. Parris, of Croydon, are acquiring land at Stafford Road, WADDON, for the erection of dwelling-houses.

*

The CROYDON Corporation has asked the borough engineer to prepare plans and estimates for the provision of additional slipper baths for men at the Central Baths, Croydon.

*

The LEICESTER Corporation is to widen and sewer Saffron Lane at a cost of £22,000.

The CROYDON Corporation has asked the borough engineer to submit sketch plans and estimates for the provision of slipper baths and washhouses at Mitcham Road.

*

The Church Authorities are to erect a parish hall in Wickham Road, SHIRLEY. The Wesleyan Trustees are to build a church, hall and manse at the corner of Shirley Road and Wickham Road.

*

Plans passed by the CROYDON Corporation: Four houses, Thornton Road, for Mr. L. W. Harris; arcade addition, North End, for Mr. S. Burmseter; bakehouse and store, 120 Cherry Orchard Road, for Messrs. G. Green and Son, Ltd.; wholesale shop, Frith Road, for Messrs. Morris & Co.; twelve houses, Norbury Cross, for Mr. J. Midmer; garages and showroom, London Road, Norbury, for Mr. C. G. Allen; alterations and additions, "The Lion" public-house, Pawsons Road, for Messrs. Blake, Son and Williams; four houses, Wickham Avenue, for Mr. P. Richardson; four flats, Prince Road, for Mr. H. P. Lake.

*

The CROYDON Corporation is acquiring 68 acres at Mitcham Road, for housing and other purposes. The Housing Committee suggest that 336 houses should be erected on part of the estate.

*

Messrs. Clayton and Black, Prince Albert Street, Brighton, have submitted to the Croydon Corporation plans for alteration and additions at the Picture House, North End, CROYDON.

*

The Addiscombe Cinema, Ltd., of Croydon, have prepared plans for the erection of a cinema at Lower Addiscombe Road, and the CROYDON Corporation recommends the sanction of the plans.

*

A hall in connection with St. Stephen's Church is to be erected on land adjoining the Winterbourne School, NORBURY, and plans have been submitted to the Croydon Corporation by Mr. B. C. E. Bayley.

*

The Southern Foundries, Ltd., of Stafford Road, are to build twenty-three houses and twenty-four flats in Stafford Road, WADDON, adjoining the site of their factory.

*

The SHEFFIELD Education Committee has obtained a site on the Longley housing estate for the erection of an elementary school.

*

The estate architect has prepared a lay-out plan of the proposed extension of St. George's building estate, Cullercoats, TYNEMOUTH.

*

Messrs. Smallpiece and Merriman are to erect shops on Lord Onslow's Farnham Road estate, GUILDFORD.

The LONDON Master Builders' Association is asking the borough councils to adopt the principle that quantities are to be supplied when tenders are invited for building work the cost of which will exceed £1,000.

*

The GUILDFORD Corporation proposes the following model clauses in connection with the town-planning scheme: That not more than four dwelling-houses or residential buildings shall be erected in one continuous block; that a dwelling-house or residential building shall not be erected nearer than 6 ft. to other buildings or nearer than 3 ft. to the owner's boundary; that a building of any type other than a dwelling-house or residential building shall not be erected nearer than 3 ft. to a dwelling-house or residential building.

*

Messrs. Lanchester, Lucas and Lodge have submitted to the Corporation a section of the lay-out of Braunstone estate, LEICESTER, which has been prepared in conjunction with the housing architect, Mr. Fyfe. The section which has been considered desirable to develop in the first instance is that area lying between Fosse Road South and Hinckley Road, and Braunstone Park and the L.M.S. Railway (Burton branch). The area of this section is approximately 222 acres. The lay-out of this portion will provide accommodation for approximately 1,200 houses. It is thought advisable for the construction of roads and sewers to be proceeded with in readiness for future contracts. A 60-ft. road is suggested skirting Braunstone Park. Most of the other roads, with the exception of town-planning roads are 40 ft. wide. Open spaces and sites for public buildings have been reserved.

*

Messrs. Hodgson, Lunn & Co. are to build fifty houses on the Paddocks estate, Burpham, GUILDFORD.

*

The NORTHAMPTON Corporation is seeking sanction to borrow £9,000 for further housing subsidies.

*

The SOUTH SHIELDS Corporation has asked Messrs. T. A. Page and Son to prepare plans and sections for the proposed new fire station.

*

The Metropolitan Asylums Board is to reorganize the kitchen arrangements at the South-Western Hospital, TOOTING.

*

Plans passed by the SOUTH SHIELDS Corporation: Ten garages and filling station, "Selwood," Sunderland Road, Harton, for Messrs. T. A. Page and Son; two shops, Stanhope Road, for Mr. Howard Hill; glass roof over part of yard at rear of business premises, Ocean Road, for Messrs. P. Mancini and Son.

*

The WOODFORD U.D.C. has passed plans for additions at St. Aubyn's School.

The Metropolitan Asylums Board is to prepare a scheme for the provision of 350 beds for the treatment of London children suffering from rheumatic diseases by the extension of Queen Mary's Hospital for Children, CARSHALTON.

*

The borough engineer of SOUTH SHIELDS is to prepare a plan showing the lay-out of the northern portion of the Mitre Street unhealthy area for the purpose of sites for suitable houses for the working classes.

*

Plans passed by the HASTINGS Corporation: Open-air school pavilion, "Stepping Stones," St. Paul's Place, St. Leonards, for Mr. J. Hunt, architect; sawing-shed, Gas Works Yard, Queen's Road, for Messrs. Callow and Callow, architects; billiard-room, Alexandra Hotel, Eversfield Place, St. Leonards, for Messrs. Callow and Callow, architects; alterations, Palace Hotel, White Rock, Hastings, for Messrs. H. Ward and Son, architects; alterations to entrance, Central Picture Palace, Bank Buildings, Hastings, for Mr. P. Oxley.

*

The STALYBRIDGE Corporation is purchasing land at Heyrod for the provision of working-class dwellings.

*

The HASTINGS Corporation has obtained sanction to borrow £14,200 for sea-defence works.

*

Plans passed by the STRETFORD U.D.C.: Eighteen houses, St. George's Road, for Mr. E. Jackson; six houses, St. George's Road, for Messrs. Archer and McAlpin; two houses, Seymour Grove, for Messrs. Smith and Alcock; two houses, Edge Lane, for Mr. M. Wheeler; boundary wall, off Warwick Road North, for Messrs. W. T. Glover & Co., Ltd.; extension of cable shop, off Warwick Road North, for Messrs. W. T. Glover & Co., Ltd.

*

At the last meeting of the NEWPORT (I.W.) Corporation the borough engineer submitted a sketch plan and estimate in connection with a suggested provision of council offices on the vacant land in Town Lane, and it was decided to refer the matter to a sub-committee to report upon.

*

Plans passed by NEWPORT (I.W.) Corporation: Paint shop, Lower St. James Street, for Messrs. H. Margham and Sons; joinery works, Leverton Row, for Messrs. H. W. Morey and Sons, Ltd.

*

The Ministry of Health has held an inquiry into the application of the WAKEFIELD Corporation for sanction to the appropriation of land at Snapethorpe for a site for an infectious diseases hospital and sanatorium.

RATES OF WAGES

			I	II
			s. d.	s. d.
A	ABERDARE	S. Wales & M.	1 8	1 3½
A₁	Abergavenny	S. Wales & M.	1 7½	1 2½
B	Abingdon ..	S. Counties	1 6	1 1½
A	Accrington	N.W. Counties	1 8	1 3½
A₃	Addlestone	S. Counties	1 6½	1 2
A	Adlington ..	N.W. Counties	1 8	1 3½
A	Airdrie ..	Scotland	*1 8	1 3½
C₁	Aldeburgh	E. Counties	1 4	1 0½
A	Altrincham	N.W. Counties	1 8	1 3½
B₃	Appleby ..	N.W. Counties	1 4½	1 0½
A	Ashton-under-Lyne	N.W. Counties	1 8	1 3½
A₃	Atherstone	Mid. Counties	1 6½	1 2
B₃	Aylesbury ..	S. Counties	1 4½	1 0½
B₃	BANBURY	S. Counties	1 4½	1 0½
B₃	Bangor ..	N.W. Counties	1 5	1 1
A	Barnard Castle	N.E. Coast	1 8	1 3½
A	Barnsley ..	Yorkshire	1 8	1 3½
B₁	Barnstaple	S.W. Counties	1 5½	1 1½
A	Barrow ..	N.W. Counties	1 8	1 3½
A	Barry ..	S. Wales & M.	1 8	1 3½
B₃	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 6	1 1½
A	Batley ..	Yorkshire	1 8	1 3½
B	Bedford ..	E. Counties	1 6	1 1½
A₂	Berwick-on-Tweed	N.E. Coast	1 7	1 2½
A₂	Bewdley ..	Mid. Counties	1 7	1 2½
B₃	Bicester ..	Mid. Counties	1 4½	1 0½
A	Birkenhead	N.W. Counties	*1 10	1 4½
A	Birmingham	Mid. Counties	1 8	1 3½
A	Bishop Auckland	N.E. Coast	1 8	1 3½
A	Blackburn	N.W. Counties	1 8	1 3½
A	Blackpool	N.W. Counties	1 8	1 3½
A	Blyth ..	N.E. Coast	1 8	1 3½
B₃	Bognor ..	S. Counties	1 4½	1 0½
A	Bolton ..	N.W. Counties	1 8	1 3½
A₃	Boston ..	Mid. Counties	1 6½	1 2
B₁	Bournemouth	S. Counties	1 6	1 1½
B₂	Bovey Tracey	S.W. Counties	1 5	1 1
A	Bradford ..	Yorkshire	1 8	1 3½
A₂	Brentwood	E. Counties	1 7	1 2½
A	Bridgend ..	S. Wales & M.	1 8	1 3½
B₂	Bridgwater	S.W. Counties	1 5	1 1
A₁	Bridlington	Yorkshire	1 7½	1 2½
A	Brighouse	Yorkshire	1 8	1 3½
B₁	Brighton ..	S. Counties	1 6	1 1½
A	Bristol ..	S.W. Counties	1 8	1 3½
B₃	Brixham ..	S.W. Counties	1 4½	1 0½
A₂	Bromsgrove	Mid. Counties	1 7	1 2½
C	Bromyard ..	Mid. Counties	1 4	1 0½
A	Burnley ..	N.W. Counties	1 8	1 3½
A	Burslem ..	Mid. Counties	1 8	1 3½
A₃	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 8	1 3½
A₁	Buxton ..	N.W. Counties	1 7½	1 2½
B	CAMBRIDGE	E. Counties	1 6	1 1½
B₃	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 8	1 3½
A	Carlisle ..	N.W. Counties	1 8	1 3½
B	Carmarthen	S. Wales & M.	1 6	1 1½
B₂	Carnarvon	N.W. Counties	1 5	1 1
A₁	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 8	1 3½
B₁	Chatham ..	S. Counties	1 5½	1 1½
B₁	Chelmsford	E. Counties	1 5½	1 1½
A₃	Cheltenham	S.W. Counties	1 6½	1 2
A	Chester ..	N.W. Counties	1 8	1 3½
A	Chesterfield	Mid. Counties	*1 8	1 3½
B₃	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 8	1 3½
B₂	Cirencester	S. Counties	1 5	1 1
A	Clitheroe ..	N.W. Counties	1 8	1 3½
A	Clydebank	Scotland	1 8	1 3½
A	Coalville ..	Mid. Counties	1 8	1 3½
B₁	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 8	1 3½
B₁	Colwyn Bay	N.W. Counties	1 5½	1 1½
A	Consett ..	N.E. Coast	1 8	1 3½
B₁	Conway ..	N.W. Counties	1 5½	1 1½
A	Coventry ..	Mid. Counties	1 8	1 3½
A₃	Crewe ..	N.W. Counties	1 6½	1 2
A₃	Cumberland	.....	1 6½	1 2
A	DARLINGTON	N.E. Coast	1 8	1 3½
A	Darwen ..	N.W. Counties	1 8	1 3½
B₃	Deal ..	S. Counties	1 4½	1 0½
B₁	Denbigh ..	N.W. Counties	1 5½	1 1½
A	Derby ..	Mid. Counties	1 8	1 3½
A	Dewsbury ..	Yorkshire	1 8	1 3½
B	Didcot ..	S. Counties	1 6	1 1½
A	Doncaster	Yorkshire	1 8	1 3½
C₁	Dorchester	S.W. Counties	1 4	1 0½
A₃	Driffield ..	Yorks	1 6½	1 2
A₃	Droitwich ..	Mid. Counties	1 6½	1 2
A₁	Dudley ..	Mid. Counties	1 7½	1 2½
A	Dundee ..	Scotland	1 8	1 3½
A	Durham ..	N.E. Coast	1 8	1 3½
B₁	EASTBOURNE	S. Counties	1 6	1 1½
A	Ebbw Vale	S. Wales & M.	1 8	1 3½
A	Edinburgh	Scotland	1 8	1 3½
A	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 8	1 3½
B	Exeter ..	S.W. Counties	*1 7	1 2½
B₂	Exmouth ..	S.W. Counties	1 5	1 1
B	FELIXSTOWE	E. Counties	1 6	1 1½
A₃	Filey ..	Yorks	1 6½	1 2
A	Fleetwood ..	N.W. Counties	1 8	1 3½
B₂	Folkestone	S. Counties	1 5	1 1
A	Frodsham ..	N.W. Counties	1 8	1 3½
B₃	Frome ..	S.W. Counties	1 4½	1 0½
A	GATESHEAD	N.E. Coast	1 8	1 3½
B₁	Gillingham	S. Counties	1 5½	1 1½
A₃	Gloucester	S.W. Counties	1 6½	1 2
A₂	Goole ..	Yorkshire	1 7	1 2½
B	Gosport ..	S. Counties	1 6	1 1½
A₃	Grantham	Mid. Counties	1 6½	1 2
A₂	Gravesend	S. Counties	1 7½	1 2½
A	Greenock ..	Scotland	*1 8	1 3½
A	Grimsby ..	Yorkshire	1 8	1 3½
B₁	Guildford ..	S. Counties	1 5½	1 1½
A	HALIFAX ..	Yorkshire	1 8	1 3½
A	Hanley ..	Mid. Counties	1 8	1 3½
A	Harrogate	Yorkshire	1 8	1 3½
A	Hartlepools	N.E. Coast	1 8	1 3½
B₂	Harwich ..	E. Counties	1 5	1 1
B₃	Hastings ..	S. Counties	1 4½	1 0½
B₁	Hatfield ..	S. Counties	1 5½	1 1½
B	Hereford ..	S. W. Counties	1 6	1 1½
B	Hertford ..	E. Counties	1 5½	1 1½
A₁	Heysham ..	N.W. Counties	1 7½	1 2½
A	Howden ..	N.E. Coast	1 8	1 3½
A	Huddersfield	Yorkshire	1 8	1 3½
A	Hull ..	Yorkshire	1 8	1 3½

The initial letter opposite each entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains, is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A	ILKLEY ..	Yorkshire	1 8	1 3½
A	Immingham	Mid. Counties	1 8	1 3½
B	Ipswich ..	E. Counties	1 6	1 1½
C₁	Isle of Wight	S. Counties	1 4	1 0½
A	JARROW ..	N.E. Coast	1 8	1 3½
A	KEIGHLEY	Yorkshire	1 8	1 3½
B₁	Kendal ..	N.W. Counties	1 5½	1 1½
B₁	Keswick ..	N.W. Counties	1 5½	1 1½
B	Kettering ..	Mid. Counties	1 6	1 1½
A₂	Kidderminster	Mid. Counties	1 7	1 2½
B₂	King's Lynn	E. Counties	1 5	1 1
A	LANCASTER	N.W. Counties	1 8	1 3½
A₂	Leamington	Mid. Counties	1 7	1 2½
A	Leeds ..	Yorkshire	1 8	1 3½
A	Leek ..	Mid. Counties	1 8	1 3½
A	Leicester ..	Mid. Counties	1 8	1 3½
A	Leigh ..	N.W. Counties	1 8	1 3½
B₃	Lewes ..	S. Counties	1 4½	1 0½
A₃	Lichfield ..	Mid. Counties	1 6½	1 2
A	Lincoln ..	Mid. Counties	1 8	1 3½
A	Liverpool ..	N.W. Counties	*1 10	1 4½
B	Llandudno	N.W. Counties	1 5½	1 1½
A	Llanelly ..	S. Wales & M.	1 8	1 3½
	London (12 miles radius)		1 9½	1 4½
	Do. (12-15 miles radius)		1 9	1 4
A	Long Eaton	Mid. Counties	1 8	1 3½
A	Loughborough	Mid. Counties	1 8	1 3½
B	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 8	1 3½
A₁	MACCLESFIELD	N.W. Counties	1 7½	1 2½
B	Maidstone	S. Counties	1 5½	1 1½
A₃	Malvern ..	Mid. Counties	1 6½	1 2
A	Manchester	N.W. Counties	1 8	1 3½
A	Mansfield ..	Mid. Counties	1 8	1 3½
B₃	Margate ..	S. Counties	1 4½	1 0½
A	Matlock ..	Mid. Counties	1 6½	1 2
A	Merthyr ..	S. Wales & M.	1 8	1 3½
A	Middlesbrough	N.E. Coast	1 8	1 3½
A₃	Middlewich	N.W. Counties	1 6½	1 2
B₂	Minehead ..	S.W. Counties	1 5	1 1
A	Monmouth	S. Wales & M.	1 8	1 3½
	S. and E. Glamorganshire			
A₁	Morecambe	N.W. Counties	1 7½	1 2½
A₃	NANTWICH	N.W. Counties	1 6½	1 2
A	Neath ..	S. Wales & M.	1 8	1 3½
A	Nelson ..	N.W. Counties	1 8	1 3½
A	Newcastle ..	N.E. Coast	1 8	1 3½
A	Newport ..	S. Wales & M.	1 8	1 3½
A	Normanton	Yorkshire	1 8	1 3½
A₂	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 8	1 3½
A	North Shields	N.E. Coast	1 8	1 3½
A₃	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 8	1 3½
A	Nuneaton ..	Mid. Counties	1 8	1 3½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 8	1 3½
A₃	Oswestry ..	Mid. Counties	1 6½	1 2
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 8	1 3½
C	Pembroke	S. Wales & M.	1 4½	1 0½
A	Perth ..	Scotland	*1 8	1 3
A₃	Peterborough	Mid. Counties	1 6½	1 2
A	Plymouth	S.W. Counties	*1 8	1 3½
A	Pontefract	Yorkshire	1 8	1 3½
A	Pontypridd	S. Wales & M.	1 8	1 3½
B	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 8	1 3½
A	QUEENSFERRY	N.W. Counties	1 8	1 3½
B	READING ..	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A₃	Retford ..	Mid. Counties	1 6½	1 2
A	Rhondda Valley	S. Wales & M.	1 8	1 3½
A₃	Ripon ..	Yorkshire	1 6½	1 2
A	Rochdale ..	N.W. Counties	1 8	1 3½
B	Rochester ..	S. Counties	1 5½	1 1½
A₁	Ruabon ..	N.W. Counties	1 7½	1 2½
A₂	Rugby ..	Mid. Counties	1 8	1 3½
A₃	Rugeley ..	Mid. Counties	1 6½	1 2
A	Runcorn ..	N.W. Counties	1 8	1 3½
A₃	ST. ALBANS	E. Counties	1 6½	1 2
A	St. Helens	N.W. Counties	1 8	1 3½
B₃	Salisbury	S.W. Counties	1 4½	1 0½
A₁	Scarborough	Yorkshire	1 7½	1 2½
A	Scunthorpe	Mid. Counties	1 8	1 3½
A	Sheffield ..	Yorkshire	1 8	1 3½
A	Shipley ..	Yorkshire	1 8	1 3½
A₃	Shrewsbury	Mid. Counties	1 6½	1 2
A₂	Skipton ..	Yorkshire	1 7	1 2½
B	Slough ..	S. Counties	1 5½	1 1½
A₂	Solihull ..	Mid. Counties	1 7	1 2½
A₃	South'pton	S. Counties	1 6½	1 2
B₁	Southend-on-Sea	E. Counties	1 5½	1 1½
A	Southport ..	N.W. Counties	1 8	1 3½
A	S. Shields ..	N.E. Coast	1 8	1 3½
A₂	Stafford ..	Mid. Counties	1 7	1 2½
A	Stockport ..	N.W. Counties	1 8	1 3½
A	Stockton-on-Tees	N.E. Coast	1 8	1 3½
A	Stoke-on-Trent	Mid. Counties	1 8	1 3½
B	Stroud ..	S.W. Counties	1 5½	1 1½
A	Sunderland	N.E. Coast	1 8	1 3½
A	Swadlincote	Mid. Counties	1 8	1 3½
A	Swansea ..	S. Wales & M.	1 8	1 3½
B	Swindon ..	S.W. Counties	1 6	1 1½
A₁	TAMWORTH	N.W. Counties	1 7½	1 2½
B₁	Taunton ..	S.W. Counties	1 5½	1 1½
A	Teeside Dist.	N.E. Counties	1 8	1 3½
B	Teignmouth	S.W. Coast	1 6	1 1½
A	Todmorden	Yorkshire	1 8	1 3½
A₂	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 4	1 0½
B₁	Tunbridge Wells	S. Counties	1 5½	1 1½
A	Tunstall ..	Mid. Counties	1 8	1 3½
A	Tyne District	N.E. Coast	1 8	1 3½
A	WAKEFIELD	Yorkshire	1 8	1 3½
A₁	Walsall ..	Mid. Counties	1 7½	1 2½
A	Warrington	N.W. Counties	1 8	1 3½
A₂	Warwick ..	Mid. Counties	1 7	1 2½
B	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 8	1 3½
B	Weston-s-Mare	S.W. Counties	1 6	1 1½
A₃	Whitby ..	Yorkshire	1 7	1 2½
A	Widnes ..	N.W. Counties	1 8	1 3½
A	Wigan ..	N.W. Counties	1 8	1 3½
B₂	Winchester	S. Counties	1 5	1 1
B	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 8	1 3½
A₃	Worcester ..	Mid. Counties	1 6½	1 2
A₃	Worksop ..	Yorkshire	1 6½	1 2
A₁	Wrexham ..	N.W. Counties	1 7½	1 2½
B	Wycombe ..	S. Counties	1 6	1 1½
B₁	YARMOUTH	E. Counties	1 5½	1 1½
B₂	Yeovil ..	S.W. Counties	1 5	1 1
A	York ..	Yorkshire	1 8	1 3

* In these areas the rates of wages for certain trades (usually Painters and Plasterers) vary slightly from those given. The rates for each trade in any given area will be sent on request.

PRICES CURRENT

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1*s.* 4½*d. per hour;* LABOURER, 1*s.* 4½*d. per hour;* NAVVY, 1*s.* 4½*d. per hour;* TIMBERMAN, 1*s.* 6*d. per hour;* SCAFFOLDER, 1*s.* 5½*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	13	0
Pit gravel, per yd.	0	18	0
Pit sand, per yd.	0	14	6
Washed sand	0	15	6
Screened ballast or gravel, add 10 per cent. per yd.			
Clinker, breeze, etc., prices according to locality.			
Portland cement, per ton	£2	19	0
Lias lime, per ton	2	10	0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.			
Transport hire per day:			
Cart and horse £1 3 0 *Trailer*	£0	15	0
3-ton motor lorry 3 15 0 *Steam roller*	4	5	0
Steam lorry, 5-ton 4 0 0 *Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRAMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube	1	18	0
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete 4–2–1 in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	2	6
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1*s.* 4½*d. per hour;* TIMBERMAN, 1*s.* 6*d. per hour;* BRICKLAYER, 1*s.* 9½*d. per hour;* PLUMBER, 1*s.* 9½*d. per hour;* WATCHMAN, 7*s.* 6*d. per shift.*

Stoneware pipes, tested quality, 4 in., per yd.	£0	1	3
DO. *6 in., per yd.*	0	2	8
DO. *9 in., per yd.*	0	3	6
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	6	9
DO. *6 in., per yd.*	0	9	2
Portland cement and sand, see "Excavator" above.			
Lead for caulking, per cwt.	£2	5	6
Gaskin, per lb.	0	0	5½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 0
DO. 6 in., per ft. 0 10 0

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4½*d. per hour;* SCAFFOLDER, 1*s.* 5½*d. per hour.*

London stocks, per M.	£4	15	0
Flettons, per M.	2	18	0
Staffordshire blue, per M.	9	10	0
Firebricks, 2½ in., per M.	11	3	0
Glazed salt, white, and ivory stretchers, per M.	24	10	0
DO *headers, per M.*	24	0	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	2	17	0
Mixed lime mortar, per yd.	1	6	0
Damp course, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6

BRICKWORK in stone lime mortar, Flettons or equal, per rod	£33	0	0
DO. in cement do., per rod	36	0	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd., sup.	0	5	0
DO. 1½ in., per yd. sup	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano, or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in Cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in..	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

THE wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

MASON

MASON, 1*s.* 9½*d. per hour;* DO. *fixer,* 1*s.* 10½*d. per hour;* LABOURER, 1*s.* 4½*d. per hour;* SCAFFOLDER, 1*s.* 5½*d. per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	7
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super	0	6	6
York templates sawn, per ft. cube	0	6	9
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4

HALF SAWING, per ft. sup.	£0	1	0
Add to the foregoing prices if in York stone 35 per cent.			
DO. Mansfield, 12½ per cent.			
Deduct for Bath, 33⅓ per cent.			
DO. for Chilmark, 5 per cent.			
SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	9	0
YORK SILLS, W. & T., ft. cub. fixed	1	13	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	6
DO. 2½ in. thick, per ft. sup.	0	1	9

SLATER AND TILER

SLATER, 1*s.* 9½*d. per hour;* TILER, 1*s.* 9½*d. per hour;* SCAFFOLDER, 1*s.* 5½*d. per hour;* LABOURER, 1*s.* 4½*d. per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies	£14	0	0
Countess	27	0	0
Duchess	32	0	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	6	3	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	1	10
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6	7 0
Grey-green do.	5	9 0
Green peggies, 12 in. to 8 in. long	4	17 0

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	5	6	0
DO., machine-made do., per square	4	17	0
Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries for Asbestos Tiling."

CARPENTER AND JOINER

CARPENTER, 1*s.* 9½*d. per hour;* JOINER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4½*d. per hour.*

Timber, average prices at Docks, London Standard Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£20	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	2	0
Mahogany, per ft. sup. of 1 in.	0	2	0
DO. *Cuba, per ft. sup. of 1 in.*	0	3	0
Teak, per ft. sup. of 1 in.	0	3	0
DO., *ft. cube*	0	15	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	5	6
DO. framed in floors, roofs, etc., per ft. cube	0	6	6
DO., framed in trusses, etc., including ironwork, per ft. cube	0	7	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd..	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	10	0
TURNING pieces to flat or segmenta soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over, per ft. sup.	0	1	2

[continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1 10 0
DO. in narrow widths to beams, etc., per ft. sup.	0 0 6
USE and waste of timbers, allow 25 per cent. of above prices.	
SLATE BATTENING, per sq.	£0 12 6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2 10 0
STOUT feather-edged tilting fillet to eaves, per ft. run	0 0 6
FEATHER-edged springer to trimmer arches, per ft. run	0 0 4
STOUT herringbone strutting (joists measured in), per ft. run	0 0 6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2 0 0
RUBEROID or similar quality roofing, one-ply, per yd. sup.	0 2 3
DO., two-ply, per yd. sup.	0 2 6
DO., three-ply, per yd. sup.	0 3 0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2 5 0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0 1 0
TONGUED and mitred angles to do.	0 0 6
WOOD block flooring standard blocks laid herringbone in mastic :	
Deal 1 in. thick, per yd. sup.	0 10 0
DO. 1¼ in. thick, per yd. sup.	0 12 0
Maple 1¼ in. thick, per yd. sup.	0 15 0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0 2 6
DO. 2 in. do., per ft. sup.	0 2 9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0 4 6
MOULDED horns, extra each	0 0 3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0 2 6
DO. moulded both sides, per ft. sup.	0 2 9
DO. 2 in. thick, square both sides, per ft. sup.	0 2 9
DO. moulded both sides, per ft. sup.	0 3 0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0 3 6
If in oak, mahogany or teak, multiply 3 times.	
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0 15 0
Add for extra labours, per ft. run	0 0 1
STAIRCASE work :	
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0 2 6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0 2 6
If ramped, per ft. run	0 5 0
SHORT ramps, extra each	0 7 6
ENDS of treads and risers housed to strings, each	0 1 0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0 1 6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0 5 6
1¼ in. square deal bar balusters, framed in, per ft. run	0 0 6
FITTINGS :	
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0 1 6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0 2 9
TEAK grooved draining boards, 1¼ in. thick and bedding, per ft. sup.	0 4 6
IRONMONGERY :	
Fixing only (including providing screws) :	
TO DEAL—	
Hinges to sashes, per pair	0 1 2
Do. to doors, per pair	0 1 7
Barrel bolts, 9 in., iron, each	0 1 0
Sash fasteners, each	0 1 0
Rim locks, each	0 1 9
Mortice locks, each	0 4 0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour ;* MATE, *do.* 1*s.* 4*d. per hour ;* ERECTOR, 1*s.* 9½*d. per hour ;* FITTER, 1*s.* 9½*d. per hour ;* LABOURER, 1*s.* 4*d. per hour.*

*

Mild steel in British standard sections, per ton	£12 10 0
Sheet steel :	
Flat sheets, black, per ton	19 0 0
Do., galvd., per ton	23 0 0
Corrugated sheets, galvd., per ton	23 0 0
Driving screws, galvd., per grs.	0 1 10
Washers, galvd., per grs.	0 1 1
Bolts and nuts, per cwt. and up	1 18 0

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MILD STEEL in trusses, etc., erected, per ton	25 10 0
DO., in small sections as reinforcement, per ton	16 10 0
DO., in compounds, per ton	17 0 0
DO., in bar or rod reinforcement, per ton	20 0 0
WROT IRON in chimney bars, etc., including building in, per cwt.	2 0 0
DO., in light railings and balusters, per cwt.	2 5 0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0 2 0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour ;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

*

Lead, milled sheet, per cwt.	£2 4 6
DO. *drawn pipes, per cwt.*	2 6 0
DO. *soil pipe, per cwt.*	2 8 0
DO. *scrap, per cwt.*	1 9 6
Copper, sheet, per lb.	0 1 0
Solder, plumber's, per lb.	0 1 2
DO. *fine, per lb.*	0 1 5
Cast-iron pipes, etc. :	
L.C.C. soil, 3 in., per yd.	0 4 1
DO. *4 in., per yd.*	0 5 0
R.W.P., 2½ in., per yd.	0 2 0
DO. *3 in., per yd.*	0 2 5
DO. *4 in., per yd.*	0 3 3
Gutter, 4 in. H.R., per yd.	0 1 5
DO. *4 in. O.G., per yd.*	0 1 9

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MILLED LEAD and labour in gutters, flashings, etc.	3 12 6
LEAD PIPE, fixed, including running joints, bends and tacks, ½ in., per ft.	0 0 2 1
DO. ¾ in., per ft.	0 2 5
DO. 1 in., per ft.	0 3 3
DO. 1¼ in., per ft.	0 4 6
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0 6 0
DO. 3 in., per ft.	0 7 0
DO. 4 in., per ft.	0 9 9
WIPED soldered joint, ½ in., each	0 2 6
DO. ¾ in., each	0 3 2
DO. 1 in., each	0 3 8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0 11 0
DO. ¾ in., each	0 13 6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0 1 6
DO. 3 in., per ft. run	0 1 11
DO. 4 in., per ft. run	0 2 9
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0 2 0
DO. O.G., 4 in., per ft.	0 2 3
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0 4 6
DO. 3 in., per ft.	0 3 6
Fixing only :	
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2 5 0
BATHS, with all joints	1 3 6
LAVATORY BASINS only, with all joints, on brackets, each	1 10 0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour (plus allowances in London only) ;* LABOURER, 1*s.* 4½*d. per hour.*

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Chalk lime, per ton	£2 17 0
Hair, per cwt.	0 18 0
Sand and cement see "Excavator," etc., above.	
Lime putty, per cwt.	£0 2 9
Hair mortar, per yd.	1 7 0
Fine stuff, per yd.	1 14 0
Sawn laths, per bdl.	0 2 9
Keene's cement, per ton	5 15 0
Sirapite, per ton	3 10 0
DO. *fine, per ton*	3 18 0
Plaster, per ton	3 0 0
DO. *per ton*	3 12 6
DO. *fine, per ton*	5 12 0
Thistle plaster, per ton	3 9 0
Lath nails per lb.	0 0 4

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LATHING with sawn laths, per yd.	0 1 7
METAL LATHING, per yd.	0 2 3
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0 2 4
DO. vertical, per yd.	0 2 7
RENDER, on brickwork, 1 to 3, per yd.	0 2 7
RENDER in Portland and set in fine stuff, per yd.	0 3 3
RENDER, float, and set, trowelled, per yd.	0 2 9
RENDER and set in Sirapite, per yd.	0 2 5
DO. in Thistle plaster, per yd.	0 2 5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0 0 5
EXTRA, if on ceilings, per yd.	0 0 5
ANGLES, rounded Keene's on Portland, per ft. lin.	0 0 6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0 0 3
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1 11 6
FIBROUS PLASTER SLABS, per yd.	0 1 10

GLAZIER

GLAZIER, 1*s.* 8½*d. per hour.*

*

Glass : 4ths in crates :	
Clear, 21 oz.	£0 0 5
DO. 26 oz.	0 0 5½
Cathedral white, per ft.	0 0 7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0 1 8
DO. *4 ft. sup.* ,,	0 3 2
DO. *6 ft. sup.* ,,	0 3 4
DO. *20 ft. sup.* ,,	0 3 11
DO. *45 ft. sup.* ,,	0 4 1
DO. *65 ft. sup.* ,,	0 4 3
DO. *100 ft. sup.* ,,	0 4 6
Rough plate, ⅛ in., per ft.	0 0 6⅞
DO. *¼ in., per ft.*	0 0 7
Linseed oil putty, per cwt.	0 17 6

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GLAZING in putty, clear sheet, 21 oz.	0 0 11
DO. 26 oz.	0 1 0
GLAZING in beads, 21 oz., per ft.	£0 1 1
DO. 26 oz., per ft.	0 1 4
Small sizes slightly less (under 3 ft. sup.).	
Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.	
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0 3 0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.	

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8½*d. per hour ;* LABOURER, 1*s.* 4½*d. per hour ;* FRENCH POLISHER, 1*s.* 9*d. per hour ;* PAPERHANGER, 1*s.* 8½*d. per hour.*

*

Genuine white lead, per cwt.	£3 11 0
Linseed oil, raw, per gall.	0 3 7
DO., *boiled, per gall.*	0 3 10
Turpentine, per gall.	0 6 2
Liquid driers, per gall.	0 9 6
Knotting, per gall.	1 4 0
Distemper, washable, in ordinary colours, per cwt., and up	2 0 0
Double size, per firkin	0 3 6
Pumice stone, per lb.	0 0 4
Single gold leaf (transferable), per book	0 1 11
Varnish, copal, per gall. and up	0 18 0
DO., *flat, per gall.*	1 2 0
DO., *paper, per gall.*	1 0 0
French polish, per gall.	0 19 0
Ready mixed paints, per gall. and up	0 10 6

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LIME WHITING, per yd. sup.	0 0 3
WASH, stop, and whiten, per yd. sup.	0 0 6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0 0 9
KNOT, stop, and prime, per yd. sup.	0 0 7
PLAIN PAINTING, including mouldings, and plaster or joinery, 1st coat, per yd. sup.	0 0 6
DO., subsequent coats, per yd. sup.	0 0 9
DO., enamel coat, per yd. sup.	0 2½
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0 3 8
FIGURED DO., DO., per yd. sup.	0 5 6
FRENCH POLISHING, per ft. sup.	0 1 2
WAX POLISHING, per ft. sup.	0 0 6
STRIPPING old paper and preparing, per piece	0 1 7
HANGING PAPER, ordinary, per piece	0 1 10
DO., fine, per piece, and upwards	0 2 4
VARNISHING PAPER, 1 coat, per piece	0 9 0
CANVAS, strained and fixed, per yd. sup.	0 3 0
VARNISHING, hard oak, 1st coat, yd. sup.	0 1 2
DO., each subsequent coat, per yd. sup.	0 0 11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.
The measured work price is on the same basis . . . per ft. sup. £0 0 2½

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3*d.* to	0 0 6
Plaster board, per yd. sup. . from	0 1 7
PLASTER BOARD, fixed as last, per yd. sup. . . . . from	0 2 8
Asbestos sheeting, ⅛ in., grey flat, per yd. sup.	0 2 3
DO., *corrugated, per yd. sup.*	0 3 3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0 4 0
DO., corrugated, per yd. sup.	0 5 0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2 15 0
DO., red	3 0 0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16 0 0
DO., *red*	18 0 0
ASBESTOS COMPOSITION FLOORING : Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0 7 0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0 6 6
Metal casements for wood frames, domestic sizes, per ft. sup.	0 1 6
DO., *in metal frames, per ft. sup.*	0 1 9
HANGING only metal casement in, but not including wood frames, each	0 2 10
BUILDING in metal casement frames, per ft. sup.	0 0 7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup. :

Thickness	⅛ in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	5½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—