Vol. LX. No. 1543



With which is incorporated "The Builders' Journal."



FROM AN ARCHITECT'S NOTEBOOK.

TO STUDENTS.

... and I would rather teach drawing that my pupils may learn to love Nature, than teach the looking at Nature that they may learn to draw. It is surely also a more important thing, for young people and unprofessional students, to know how to appreciate the art of others than to gain much power in art themselves.

RUSKIN : THE ELEMENTS OF DRAWING.

27-29 Tothill Street, Westminster, S.W.1.



A Museum Screen Designed by D. A. John (Architectural Association School of Architecture)

This drawing is now on exhibition at Devonshire House in the section devoted to the work of students of the Architectural Association.

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THE

ARCHITECTS' JOURNAL

27-29 Tothill, Street, Westminster, S.W.1.

Wednesday, July 30, 1924.

Volume LX. No. 1543.

Architectural Education

OW that the question of unification has been so satisfactorily settled, education is by far the most important subject to engage the attention of the architectural profession.

Since the beginning of the present century an increasing amount of attention has been paid by all architects to this vital and pressing question. The change from the old articled system to the modern method of education in the architectural schools, which commenced some twenty years ago, has of recent years been greatly accelerated, until to-day—except for a few isolated cases—it is the only method of education that we have to consider seriously in this country.

But, out of this changed method have arisen entirely new problems, one of the most important of which is the relation of school training to architectural practice. Whether not or the theory of Croce is true of art in general, the fact remains that the art of architecture can only be realized through the very practical medium of building.

It is right that youth should dream dreams and see visions, and education cannot be based on too generous or too broad a platform, but there is a danger, and a very real danger, that the schools may become so interested in the theory of expression that they may be divorced from the practice of architecture. It is not easy to see the remedy, and although many attempts to overcome the difficulties have been made, none of them has been entirely satisfactory.

The part-time system, by which the more advanced students spent a certain amount of their time in an architect's office, or on works, is not without its drawbacks.

At one time a system by which visiting architects undertook to give criticism and instruction in the schools was tried; this also had its disadvantages. In the present confused state of architectural opinion, although possibly various exponents are agreed in the main as to the proper methods of construction, they are not at all agreed on the proper methods of design, so it was not at all an unusual thing for one distinguished architect to contradict everything that had been taught by another distinguished architect who had preceded him in his visit to the school.

With very few exceptions the heads of the various schools are eminent architects engaged in practice for themselves, and therefore imbued with the spirit of building; but the same cannot be said in all cases of their staffs. It has frequently occurred that the more brilliant pupils have been taken straight from school and given positions as instructors in the same institutions in which they followed their careers as students. Neither is this altogether to be wondered at, for, in the ordinary way, a student on leaving one of the large schools has, before he can either engage in practice or earn anything but the smallest salary, to go through a further period of probation and instruction in an architect's office. What he has learned at the school will in the future years, when he comes to practice for himself, be of incalculable value, but there is the difficult hiatus of the intermediate period to be filled, and it comes as a shock to many to find that their market value as an assistant is judged by their ability to make carefully-considered working drawings, for which they have not had—and it is difficult to see how they can obtain it under the present system—the necessary preliminary training. It is true that some students assimilate much more quickly than others the information which is necessary to translate a design into terms of building, whilst others find it much more difficult.

The consequence is, that in some of our leading schools a great paper tradition has grown up, and this paper tradition can be seen reflected in some of the larger public buildings which are going on to-day. One outstanding example which will occur to many is a large building at Wembley, which looks exactly as if it were some "Prix de Rome" design come true !

We are not pleading for a return to the old conditions which prevailed during the earlier years of the schools, in which too much time was devoted to trifling problems of construction and plan; but it does appear to us that even to-day in many cases there is a want of correlation between the subjects of, say, design, history, and construction. Would it not be possible, for instance, in the case of the teaching of history, to relate this much more nearly to the history of construction by descriptions of the old building methods in the different periods, on which the different styles arose ? Such a method would be likely to interest and instruct the students, and at the same time fire their imaginations.

As we have said, the problem is a difficult one, and we do not ourselves know the answer. An architect must have an instinctive feeling for materials; he must be a skilled constructor; and beyond this, he should have the power of design. How then is the student to obtain that feeling for construction and that sympathy with his materials which it is necessary somehow or another for him to acquire? How is he to arrive at the knowledge that will make his stone buildings express the true purpose of masonry—his brickwork have the breadth and simplicity suitable to burnt clay, and his woodwork be instinctive with the spirit of the wood worker ?

Another interesting problem which has to be considered in connection with education is the conflicting claims of what are known as traditionalism and modernism.

The recent Swedish exhibition of architecture included many fine examples of the result of the modernist movement in a foreign country, but it occurred to more than one observer that some of the most satisfactory of these modernist designs concerned themselves chiefly with the treatment of industrial and other modern problems—the nearer the subject approached to the more traditional buildings, the stronger appeared to be the claims of traditional architecture. So that it would appear that the treatment of a modern factory, the buildings round a coal pit, a cinema, or even a railway station could be as frankly modernist in feeling as the capability and temperament of the designer allowed; whilst, when we get to such a purely traditional piece of work as a house or a cottage, the claims of tradition appear to be much greater, and intermediate between these two extremes are the problems of office buildings, hotels, entertainment centres, etc.

This we imagine is a statement of the case which will prove distasteful to both extreme modernist and extreme traditionalist, but, nevertheless, it appears to us to be a moderate presentment of the truth. Lastly, there is the problem of the great architectural prizes and the necessity for co-ordinating the competitions for them with the school work. It is to these and other similar questions that the educationists, gathered at what will be the greatest educational congress ever held in this country, will, we hope, give their attention, rather than to the minutiæ of education—such as the details of organization, classes, and attendances, which can very well be left to the various schools.

Our Congress Number ·

In connection with the International Congress on Architectural Education which opened in London on Monday, last, and closes on Saturday next, we publish this week a special issue. We have invited the principals of the leading schools of architecture to set forth the aims and policy of the schools they control. We have also included a large number of illustrations of the work of students, the originals of which, in many instances, will be found on the walls of Devonshire House. Our issue, therefore, serves the double purpose of setting forth principle and practice as held and followed in the leading educational institutions of the country; and it is our hope that, reinforcing the papers that have been and are still to be read during the congress, this issue will be of service in showing the aspirations, and, in some degree the achievement, of the educationists of Great Britain. Some idea of the scope and character of the congress may be gained from the fact that in addition to the galleries of the R.I.B.A., the walls of Devonshire House and Grosvenor House have had to be called upon to accommodate the great collection of drawings that has been got together-from foreign countries, from the British Dominions, and from the Homeland itself. So representative an exhibition is not likely to be seen again in this country for many years to come.

A Dinner to Mr. McArthur Butler

To celebrate the twenty-fifth anniversary of Mr. C. McArthur Butler's secretaryship of the Society of Architects a dinner was held at the Café Royal, Regent Street, on Thursday evening last. The occasion was one of delightful informality, though, coming on the day upon which the Society ratified the agreement of amalgamation with the R.I.B.A., it could not be entirely divested of a certain significance. In fact, it marked in a special way the personal triumph of Mr. McArthur Butler who, after so many years of strenuous and devoted service to the interests of the Society, and particularly of registration, sees at last a prodigious step taken towards the achievement of a great purpose. Without wishing in any way to detract from the work of others (and very splendid and self-sacrificing it has been) it may be said with perfect truth that Mr. McArthur Butler has been the very backbone of the registration movement. His letters and other contributions to the Press have kept the subject of registration constantly before the public, and before the architectural profession itself, and there can be no doubt that his unceasing exertions have been a prime factor in the movement which recently culminated in the amalgamation proposals and their acceptance by the R.I.B.A. and the Society of Architects. His services to architecture in the abstract, in contradistinction to the political side of professional affairs, have also been very considerable. It is only natural, therefore, that the members of the Society should wish to offer, at the conclusion of twenty-five years of such valuable work, and with the dissolution of the Society pending, some recognition of Mr. McArthur Butler's services. It was consequently no surprise when, at the end of the dinner,

Mr. E. J. Partridge, President of the Society, presented Mr. McArthur Butler with a handsome cheque-not, as he observed in a graceful speech, in any way representing an estimate of value, but as a mark of esteem and friendship for one whom they of the Society had always counted among their best and kindest of friends. Mr. Partridge also handed to Mr. McArthur Butler a gift for Mrs. McArthur Butler, which took the form of a finely jewelled ringa presentation made, Mr. Partridge explained, by the past-presidents, at the suggestion of Mr. Percy B. Tubbs, senior past-president, and one in which they had kindly allowed him (the speaker) to join. Mr. McArthur Butler returned thanks on behalf of himself and his wife in a charming speech, from which, incidentally, we gathered the impression that, although the Society ceases to exist, the architectural profession may still hope to have the benefit of the secretary's services in connection with the Parliamentary side of registration. It need hardly be said that Mr. McArthur Butler's health was duly toasted with musical honours.

Extremes Meet

The prevailing house shortage has been the cause of some interesting experiments in the way of conservation, rehabilitation, and adaptation of existing resources. Large houses are converted into flats, squalid areas are restored to respectability, and West End mews are transformed into domestic retreats commanding prodigious rents. An interesting example of rehabilitation is to be seen in the Smith Square neighbourhood behind the Abbey. Long before the war several of these little streets-placid eighteenth-century backwaters-had taken on a becoming respectability of character. Barton Street, Cowley Street, and Smith Square in particular were greatly sought after by wealthy people who wanted a pied-à-terre in town, conveniently situated for all interests, business, pleasure, and political. And when an ex-Chancellor of the Exchequer built himself a mansion in Smith Square the seal of dis-tinction was finally set upon the locality. The refined and the squalid are here found in striking contrast side by side. In one street you have well-preserved houses and a sense of aristocratic refinement, and in the next, houses that seem to be in the last stage of degradation, inhabited by the poorest of the poor. In Gayfere Street the extremes face each other, one side being trim and well-kept, with brightlypainted doors and gay window boxes, and the other squalid and ruinous beyond words. But even here reclamation seems to be in progress. It will be an excellent thing if the whole of the uninviting neighbourhood to the west of Smith Square can be restored to cleanliness and fitness. What remains of eighteenth-century character should be carefully preserved. It is extremely regrettable that Smith Square should ever have been tampered with. It was a perfect little enclosure of Georgian houses. Quite half of it is gone, and in place (except for some vacant plots) we now have blocks of offices and, nearby, an electricity generat-ing station. Town planners could do good work by interesting themselves in the case of Smith Square and its immediate neighbourhood.

Sliding Windows

At the Women's International Housing Congress held at Caxton Hall last week Mrs. Aldridge suggested that a new type of window was required—one that, instead of pushing up and down or opening outwards, would slide into the side of the wall, and so leave the whole frame free to the air. Such a window would be a great convenience in sultry weather, no doubt, but it would have obvious drawbacks at other times. The question of desirability apart, is such a window a practical proposition ? For one thing its introduction would mean the elimination of the bay window —square, curved, and polygonal—with which there is commonly insufficient wall space to allow for the sliding of a window. All house fronts would have to be straight, and walls would have to be thicker (and, incidentally, more costly) to accommodate the window.

THE BRITISH SCHOOLS OF ARCHITECTURE

The Architectural Association

Director of Education, ROBERT ATKINSON, F.R.I.B.A. Principal, HOWARD ROBERTSON, S.A.D.G., F.S.Arc.

IRST conclusions based on comparison between the work of the various schools which are to be represented at the exhibition of the R.I.B.A. International Congress on Architectural Education may to some extent be misleading. For the schools are represented by drawings, and their merits will be largely gauged by the quality of these drawings. Judged, first from the standpoint in design, but also very largely from that of finish, the ultimate aim of the school training in architecture and its real value may not, however, be so clearly discernible as the merits of the drawings; for experience has frequently shown that fine drawings are often produced by indifferent architects, and vice versa. In fact, a standard of ultra-high quality of finish in school drawings may sometimes be obtained at the expense of a searching study of the problem.

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It is perhaps permissible to suggest this possibility, for we undoubtedly see at the Congress some remarkable examples of careful and even elaborate presentation, portraying schemes which on closer examination reveal little contribution to design, but merely a well-thought-out assemblage of ready-made elements drawn from a commonplace and familiar vocabulary. While not denying a certain virtue in studies of this kind, there should not be, on the other hand, any hasty condemnation of those schools which are making a more interesting effort over a wider field, and the individual drawings of which may in consequence suffer to a certain degree in suavity of presentation. For in the limited time at the disposal of a school curriculum, one aim is bound to be pursued to some extent at the expense of the other.

A school of architecture is faced with a dual problem that of training for ultimate practice in architecture, and that of preparing for immediate (in some cases permanent) work as an assistant. To these ends a school may employ the method of covering a narrow field and exacting therein a definite and rigid efficiency of attainment, or it may take the view that its prime function is to awaken and direct the imagination, encouraging elasticity of thought, without, however, attempting at this stage to mould in permanence the outlook of the student.

In the schools of the Architectural Association we find, in the teaching of design, both systems to a certain extent combined. The first two years aim frankly at the acquirement of a certain technique, with a consolidation of principles and lessons gleaned from the past. The instruction in these years tends in fact more towards a routine system, permitting of solid results which may with certainty be awaited, since we are dealing with known factors. Fore-knowledge of the results to be expected permits of a high general standard of efficiency and the production of careful and competent drawings in which, however, the more liberal flights of imagination find a comparatively limited range.

In the last three years of the training, however, the problem of teaching is more difficult. The student is designing freely, drawing upon his own store of knowledge already accumulated, with, of course, continued guidance and instruction from the staff. The easier method would be, undoubtedly, to limit the nature and scope of the problems, to impose a definite stylistic framework supple enough for a reasonable majority of problems, and carry out the execution of the resulting somewhat stereotyped essays in design in the most highly detailed and finished manner possible. The immediate results, particularly from the "showman's" point of view, would probably be very gratifying. But, very definitely, the Architectural Association School staff does not accept this method. It is believed that, for the best results in the ultimate future, one of the prime essentials in training is that of stimulating the capacity for independent thought, the development of imagination, for the highest art is always imaginative.

To accomplish this, while at the same time indicating by constant repetition the requirements of good architectural design in every aspect, the school course covers in its short period a wide range of subjects and types. To no one subject can be devoted a whole term's work, nor can development of each subject reach the point attainable under a more restricted régime. The school feels, however, that it has, as it were, indicated the principles, provided the test of their application in a number of representative problems, and laid down such lines of technical knowledge and execution as may be safely followed by the student whatever the size and complexity of the problem which he may later be called upon to solve.

It will be noted, for instance, that the Architectural Association design course includes the teaching of colour, town planning, modelling, the study of form in ornament, in addition to the range of design subjects from the simple domestic problem to the ambitious lay-out. It is felt that these things are essential, but it is not suggested that the result attained in any one direction is anything but a step. Colour in some instances may be crude and harsh, but such a result may be definitely aimed at, since every beginner has timidity, but boldness requires cultivation. Individual designs may at times be bizarre, but if ever the architect is to be free to experiment, and sow his wild oats of imagination, it is surely during the period of learning and enthusiasms, when guidance is available and lessons can be drawn.

The tendencies of students, their very type even, may vary from year to year. The task of instruction requires, therefore, great flexibility and constant correctives to unfortunate tendencies, so that powers of design may be stimulated while at the same time extremes are avoided. The main point, however, to be borne in mind in examining students' work is this : the design as illustrated may notin fact, generally does not-represent what the student or the staff consider to be a finished architectural conception. Each design is an effort on the student's part to solve a problem, and expresses sometimes a conviction, more often an experimental state of mind. It is not so much through each individual drawing that the value or otherwise of tuition can be judged, but by the ultimate effect of this training, which will only crystallize when the student has left the school. The Architectural Association School does not claim, and would not desire, to produce at the end of such a short period as five years' training a finished product with definitely set architectural opinions. But it believes that its system will secure a continuous all-round progression for the student from the time of entering the school till the period of full architectural maturity, with imagination awakened and powers of appreciation developed.

HOWARD ROBERTSON.



THE ARCHITECTURAL ASSOCIATION SCHOOL OF ARCHITECTURE : A HEADLAND HOTEL BY MISS A. SLEIGH.



THE ARCHITECTURAL ASSOCIATION SCHOOL OF ARCHITECTURE : A CHARABANC STATION. BY H. BRADDOCK.

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THE ARCHITECTS' JOURNAL, JULY 30, 1924

The Liverpool University School of Architecture

Roscoe Professor of Architecture, C. H. REILLY, O.B.E., M.A.Cantab., F.R.I.B.A.

T is difficult to write about the work of the Liverpool school when an exhibition of the school drawings is on view at Devonshire House in connection with the International Congress on Architectural Education. One can say at once, however, that the staff and students of the school have felt very honoured by the couple of fine rooms allotted to them on the first floor with a wall space as large as that allotted to any other school, metropolitan or otherwise. In hanging the exhibition, which, owing to the dispersal of ex-Liverpool students all over the world, has had to be confined in the main to current work, care and thought has been expended to show as completely as possible the course a Liverpool student takes during his five years. Spectacular drawings, made for special competitions like the Rome scholarship, have not, therefore, as a rule, been shown. If the rooms had been devoted to such drawings a more striking display could no doubt have been arranged. It would not, however, have shown as well, as I hope the present exhibition does, the general scope of the Liverpool work.

With regard to the work of the school, I hope the general impression will be that it is quiet, serious work leading to a solid grip both of architectural composition and of architectural construction. In the room where the fourth- and fifth-years' work is exhibited will be seen among the drawings a thesis or final design prepared by a student, without assistance, from among each of three types of students in the school. These are those who aim at a degree or diploma with honours in design, those who do the same with honours in construction, and those who take a pass degree in which these two aspects are more evenly balanced. It must not be imagined, however, that the students who specialize in construction, like A. L. Gabr, who shows his very complete scheme for a large theatre in a set of some twenty working drawings, do not seriously study design in the sense of architectural composition and detail. As a matter of fact such students have had the ordinary criticisms that every student gets of his work from that point of view, and have had the further advantage of criticism from the construction lecturers and experts. As a result these designs often show, as in this case, very characteristic and intelligent work.

After walking through the exhibitions of the other British schools, particularly the very fine and striking one of the Architectural Association school, it may be thought that the Liverpool work is painstaking but dull. It is certainly not so experimental as that of the A.A. students. Liverpool students are not encouraged to seek exotic inspiration from modern foreign work, which in itself may only represent a passing phase. In their sketch designs, of course, they^{*} may do what they like, but in their main designs they are kept to what may be called the central position in



SIX-HOUR SKETCH DESIGN. THIRD-YEAR WORK. BY G. A. BUTLING.

architectural thought. Their studies are not only based on the classical Orders and on classical planning, but on the modes of expression discovered by the architects of the Italian Renaissance, whose work has for centuries been the chief progenitor of English, and now of American architecture. In this way we think a definite standard of taste is formed a very necessary thing even for the best student. It must not be thought, however, from this that Liverpool students do not have modern subjects set them, or in so doing are for the schools of architecture to turn out geniuses, but to raise the general level of work. As far as one can judge from the buildings by old Liverpool students, which are now beginning to appear in various parts of the world, that is what is happening. No doubt it is happening, too, with the ex-students from other schools, but Liverpool, having been established longer than any other, has the first claim in this respect.

There is no doubt that of recent years the work of



LIVERPOOL UNIVERSITY SCHOOL OF ARCHITECTURE. A WEEK'S DESIGN. THIRD-YEAR WORK.

not encouraged to seek practical and, consequently, modern solutions. The result of the methods adopted at Liverpool is, I hope, that all students completing the course return to the colonies or wherever they come from, with a definite mode of expression which they can use until with experience and growth they can attain to a more personal one of their own. A very personal mode, however, is not, in my opinion, a good thing for the average man. We have suffered too long from excessively personal buildings, or rather from attempts at giving a false individuality to modern buildings by an ignorance of past *motifs*. It is not Liverpool students has been much affected by America. Not only have members of the staff paid frequent visits to the other side, but relations have been established with certain leading New York offices by means of which the best students during their fourth year generally spend six months in that city. Our American friends have been kind enough to pay such students salaries for the period (and I do not imagine it is entirely charitable enterprise on their part), which not only enable the students to live over there in reasonable comfort, but to pay their passages either way. We have been careful to send only fourth-year men so that





LIVERPOOL UNIVERSITY SCHOOL OF ARCHITECTURE : THESIS DESIGN. ORDINARY PASS DEGREE. BY E. H. ASHBURNER.

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LIVERPOOL UNIVERSITY SCHOOL OF ARCHITECTURE: TWO OF A SET OF SIXTEEN WORKING DRAWINGS OF A DESIGN FOR A THEATRE. BY A. L. GABR, FIFTH-YEAR STUDENT.

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the rest of the school has the benefit of their experiences and impressions during their fifth year. On the whole this American experience has had two chief results: one, a much higher standard of working drawings has been established, and two, a broader and simpler treatment of design. Everyone who has been over there and who studies the American journals knows that this latter is the distinguishing feature of modern American work. It is a lesson which, I think, was needed in England after the very personal and irregular classic which followed, with us, the Gothic revival. America has in the past owed so much to England that there is no shame now in acknowledging our debt in return. At any rate, the Liverpool school is quite willing to do so, and to those who visit the Liverpool exhibition at Devonshire House that debt will be obvious. For myself I do not mind this as long as the quietness and seriousness of the work of the Liverpool school is apparent, as I think it is. C. H. R.

The London University School of Architecture

Professor of Architecture, A. E. RICHARDSON, F.R.I.B.A.

HE drawings exhibited at Devonshire House by the London University School of Architecture are confined to a selection of those prepared during last session in order to give a true representation of one year's work at the school. The drawings have been arranged as far as possible in groups to explain the sequence of work during the five-year degree and diploma courses. The work of the school is divided into two parts, the first being a preparatory period in which the student is grounded in the elementary knowledge without which architectural design is impossible.

Freehand drawing and decoration form a large part of the studio work during the first two years. This is illustrated by the group of drawings on the right-hand side of the end wall of the exhibition room. The object of this training is to develop the student's taste, to increase his facility in presenting his ideas upon paper, and to cultivate his power of design and appreciation of colour. The drawings consist of studies from the cast; and work at South Kensington Museum, where drawings are made of furniture, stained glass, pottery, and other subjects of interest. This is followed by work in the studio, where simple designs are made, based on the work previously studied in the museum. Considerable time is spent in perspective drawing and lettering.

Parallel with this general course of drawing and design, work is also carried out in the studio to teach the student the elements of the art of building. This work, which is illustrated by a few drawings to the left of the doorway, is closely correlated to the lectures on building construction, and is amplified by building demonstration. The aim of the instruction given is to encourage the student to understand the materials which, as an architect, he will use, and to enable him to express his ideas with clarity. At the same time he is taught to regard architectural draughtsmanship as a means to an end, and not an end in itself. In order to increase the student's initiative and to develop his power of design, all forms of direct copying are avoided. and the programmes set are for the design of simple structures which illustrate the current lectures. This method, while it does not produce elaborate drawings at an early stage, enables the student to work out simple problems in construction, and enables more rapid progress to be made at a later stage.

A few examples of measured work are exhibited. Students are required to study old buildings during the vacation, and this work forms part of their training, drawings of this nature being submitted at the end of their course.

At the end of the second year the student is well grounded in the grammar of his art, and can progress from this point with confidence. The studio work in the third and fourth years largely consists of working out problems of modern building designs. The programmes set are all based on the needs of the present day, and no archæological designs are made. Students are given complete freedom in the expression of their ideas, and no particular "style" is forced upon them, but it is insisted that the design shall be sound, theoretically and structurally, in every detail, and, moreover, that the expression is the natural outcome of the structure. These designs are illustrated by drawings rendered sufficiently to explain the scheme, and by the necessary working drawings. All the emphasis is placed upon the building, the drawings themselves being criticized as good or bad according to their capacity for explaining the design.

The third and fourth year work is illustrated in the exhibition room by various designs which seem to show the gradual increase in scope of the programmes according to the students' capacity.

The designs for a dairy farm are selected from the fourthyear students' diploma subject. Complete data for a modern dairy farm were given to all the students, and the designs were worked out on scientific lines. Complete working drawings were produced for one of the buildings in the scheme, and a report explaining the design was submitted with each set of drawings.

The design for a small open-air swimming bath illustrates another side of fourth-year work, where a building designed for reinforced concrete was worked out in detail under the supervision of a member of the staff of the engineering department, which works in close collaboration with the architectural department.

The fifth-year course consists in working in an architect's office, and in the atelier where advanced designs are carried out. These designs are not carried to the same degree of completion as in earlier years, but are treated more as sketch designs, the office work giving the student the necessary experience in this direction.

A few examples are exhibited of the work done in the town planning department, which is allied to the school of architecture.

The aim of the school is to produce students who are capable of designing buildings which fulfil the needs of the present day, and at the same time buildings of humane aspect which will give pleasure to the people of the twentieth century, and record the period in which they were produced.

It is to be understood that school training is mainly a preparation to the larger issues of practice. It is not posible to equip an architect in a short span of years, nothing but experience of realities can do that, but it is felt that by encouraging good taste, based on precedent, and inculcating a real and not a superficial appreciation of the scientific side of the art, such as forms part of the training in construction, that an advance will be made in the direction desired to reinstate the vital principles of building. With this in view the work now on exhibition at Devonshire House is in no sense retrospective, on the contrary, it represents the work of students who will be associated with the University for some years to come. F.



THE UNIVERSITY OF LONDON SCHOOL OF ARCHITECTURE : AN OPEN-AIR SWIMMING BATH (FOURTH-YEAR WORK). BY BARBARA POUSCHKINE.





THE UNIVERSITY OF LONDON SCHOOL OF ARCHITECTURE. THIRD-YEAR DEGREE WORK BY F. S. BARDELL.

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The Architectural School of the Royal College of Art

Professor of Architecture, J. HUBERT WORTHINGTON, M.A., A.R.I.B.A.

HE Royal College of Art is maintained by the Board of Education. It comprises five main schools as follows: Drawing and painting—Professor William Rothenstein, M.A., Hon. A.R.C.A. (the principal of the college); sculpture—Professor F. Derwent Wood, R.A., Hon. A.R.C.A.; design—Professor R. Anning Bell, R.A., R.W.S., R.B.A., Hon. LL.D., Hon. A.R.C.A.; engraving—Professor Sir Frank Short, R.A., P.R.E., Hon. A.R.C.A.; and architecture—Professor J. Hubert Worthington, M.A., A.R.I.B.A., Hon. A.R.C.A.;

assistant instructor — H. J. Harding, A.R.C.A.; Sir J. J. Burnet, A.R.A., LL.D., F.R.I.B.A., is visitor to the school of architecture; Mr. H. L. Wellington is the registrar of the college.

The large staff of instructors in the many crafts that are taught ensures a comprehensive atmosphere in which the students of each school may enlarge their artistic outlook and learn the point of view of brother artists.

The school of architecture has an important function to perform in such an institution, as an auxiliary course for the schools of drawing and painting, design, and sculpture. It deals with the relation of the arts to architectural history and practice; the spaces and forms of buildings that are decorated in colour or en-riched with sculpture; the employment of the crafts in furnishing and completion. But apart from any direct or material advantage that may be imparted to specialists, one of the primary objects of the course is to give to all students who come to the college a training in a sense of structural form in design, of proportion and scale, of space value; in the solution of a particular problem, in the right use of materials, in the attain-

ing of simplicity out of complexity, and bringing auxiliaries into harmony with the whole. These, combined with careful and accurate geometrical drawing, are lessons which cannot fail to benefit any young artist's mind. For a study of a Doric temple, a Renaissance loggia, a Cotswold cottage, or a Georgian house serves the same end as drawing or modelling from the nude. It is a training in a sense of form, a training in perception, a training in style.

At the same time it is hoped to arouse a reasoned critical faculty towards modern architecture, which, though increasing, is still rare. It is equally important that the painter should understand the principles of architecture as it is that the architect should be able to appreciate the principles of painting.

Architecture differs from the other arts in that it is

essentially a great co-operative effort between the initiator, the designer, and the executants. It cannot be properly understood until this truth is grasped, for the points where the art of building differs from those of painting and sculpture must be clearly apprehended. It is not a question of saying which is the greatest, for "all art is one." There are many methods of expression but one spirit. One would not expect or wish that Augustus John or Epstein or Roger Fry should be capable of designing and executing a Liverpool Cathedral, or an Imperial Delhi, or a Wembley

Exhibition.

of view.

The

needs qualities of leadership

and organization which are not called for in the painter or the sculptor. But each should

understand the other's point

"No co-operation without

No confidence without

This general course at the Royal College of Art cannot

be judged by the standards of the normal architectural

schools, whose main object is to train the professional architect. The majority of the

students come with little, if

any, preliminary knowledge of architecture, although they are

excellent figure draughtsmen, and they only come to the

department, at the most, for

two short days a week during their first year. The fact that their studies in architecture are

dovetailed in with their draw-

ing, modelling, or craftwork throughout the year, makes for

a feeling for the interdependence

few exceptions, takes the general course, those who dis-

cover a special bent and inclination for the subject may

continue their architectural

Whilst every first-year student in the college, with very

confidence.

knowledge.

architect



FIGURE STUDY. BY N. GOODWIN.

studies in their second year at the discretion of the professor of their own school, or particular students may take a full three-year course, qualifying for their diploma in architecture. In any case, drawing from the life forms an important part of the curriculum. Special instruction in building construction and technical subjects is arranged for in a regular architectural school, the R.C.A. department not possessing either the equipment or staff to deal adequately with the complicated technical problems that the modern architect has to meet. It must be remembered, however, that the essential principles of construction and planning are always emphasized.

of the arts.

At all times the school of architecture is open to students in an advisory capacity. For instance, painters may come for advice in working out schemes of decoration for wall surfaces, domes, and vaulted ceilings. Decorative painting





ROYAL COLLEGE OF ART MEASURED WORK BY M. V. DUFFELL AND J. G. VIDGEN-JENKS. DRAWN BY M. V. DUFFELL (FIRST-YEAR STUDENT).

is a strong feature in the college, and the admirable painting in the apse of the basilica in the Palace of Arts at Wembley, by Mr. J. K. Lawrence, the Rome student, shows that the influence of his architectural studies under Professor Pite have stood him in good stead.

Sculptors are advised on the application of their work to buildings, on the treatment of pedestals and fountains, and on the lay-out of public places and the use of civic accessories. Specialists in stagecraft work out the architectural treatment of scenery. Furniture designers, decorators, stained-glass makers, and metal workers may study the architectural basis of design as it relates to their crafts. Students in the school of engraving may learn the principles of architectural drawing and presentation that should prove of value to them.

The course of study in the architectural school is based on theory, demonstration, and practice. Theory is imparted in lectures. Demonstration is by means of the study of actual buildings or measured drawings and sketches in the British Museum Greek galleries, and the Victoria and Albert Museum. Practice is obtained through elementary design problems worked out in the studio under supervision.

The lectures are of two kinds, given alternately. Firstly, those on the principles that underlie all architectural design, dealing with the question of surrounding lay-out,



ROYAL COLLEGE OF ART. DESIGN FOR A LOGGIA IN THE ITALIAN RENAISSANCE MANNER BY N GOODWIN (FIRST-YEAR STUDENT). the evolution of the plan, the question of walls and openings and roofing problems, and the right use of materials. But as Marshal Foch has said of war: "Principles are easy, their application is difficult." The second series of lectures deals with the way the principles have been applied in certain periods of architectural history.

With a view to rousing the student to take an interest in the subject as a living reality of his own day-a matter which cannot be taken for granted-the first lectures are on modern work. Wren and the Georgian period follows, the lectures being supplemented by measured studies, followed by the designing of a small house in the Georgian The Italian Renaissance is then taken in conmanner. siderable detail, with lectures on the outstanding personalities, such as Brunelleschi, the sculptor-architect, Peruzzi, the architect-painter, Raphael, the painter-architect, Sanmicheli, the architect-engineer, and the Sangalli. Measured studies in the museum are supplemented by a design in the Renaissance manner. Classical Rome comes next, and then Greece, when both lectures and studies take place in the British Museum, followed by a design study in a Greek Order, worked out in the studio. Finally, the Mediæval period, showing the evolution from Roman, through Romanesque, and culminating in French and English Gothic, is supplemented by visits to Westminster Abbey.

Throughout considerable care is taken to explain the historical backgrounds of the various periods. A knowledge

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of the life of Greek and Roman and Mediæval and Renaissance times, and the ideals and environment that influenced the designers, are the best correctives to "illiterate cribbing" and sentimental enthusiasm. Without some historical knowledge no art can be really understood. But universal principles are deduced and instances of modern application explained.

There are, of course, many pitfalls and dangers to be guarded against. The three-years' course at the college is not so long that much time can be afforded by a student of painting or sculpture or a craft to obtain so great a mastery of architectural principles and design as would be desirable if more time were available. There is a danger that the knowledge obtained may be too superficial. This must depend on the application of the individual student.

Still, the objective is strictly limited. All that the general course can hope to do is to point the way, to enlarge the mind, to give a wider and more sympathetic outlook, to help to link art with the realities of modern existence, to cultivate, if possible, a life interest in the great art of architecture, engrafting it with their artistic sense. If the eyes of the student can be opened to the need and possibilities for intelligent co-operation and collaboration between all the arts, then the course will not be held in vain.

A college that has numbered among its teachers Alfred Stevens, Professor Lethaby, and Professor Beresford Pite, has a tradition of architectural co-operation to maintain.

The Cambridge University School of Architecture

Master, THEODORE FYFE, F.R.I.B.A.

HE Cambridge University School of Architecture aims at providing as a course for the ordinary B.A. degree, a good basis in the practical and historical aspects of architectural art. It thus attracts men who wish to graduate at Cambridge, and at the same time intend to become practising architects; but it has another function—a centre for the "History of Art as a principal subject."

The position of the school is, therefore, one which is quite consistent with the provision of a sound training, more or less on the lines of the other architectural schools in the country which do not attempt a five-years' course, but it has so far maintained a bias on the academic side. This is fostered by the courses of lectures, utilized by the students of the school of architecture, on Greek and Roman architecture and sculpture, given by the Reader in Classical archaeology,* and the lectures on various aspects of Gothic art, at least one of which can be counted on in each academic year. There are, in addition, occasional courses of lectures on other subjects in the history of art. There is also the natural tendency of a Slade Professor associated with the government of the school, to emphasize the historical side, and his own lectures cover a wide field.

On the other hand there is the Engineering Laboratory, with its training in the theory of engineering in its widest sense. The Professor of Mechanism is on the Board of the school, and he is well disposed to an interchange of teaching in the two departments. Even at present the lecturers and examiners in mechanics for the school have been obtained from the personnel of the laboratory staff, and the school has provided training in freehand drawing for engineering students. Further developments are indicated in these directions, so that the connection of the school with engineering is bound to increase rather than diminish. It will therefore be readily seen that the position of the Cambridge school is still at the interesting stage of possible development in one of two distinct directions, if it does

 At Oxford, there is also direct connection between art and archaeology, as it is possible for a candidate for the Diploma in Classical Archaeology to take Greek and Roman architecture as a principal subject in his course. not maintain an even course in a central direction, not distracted too much by the archaeologist on the one hand, or the engineer on the other. This, undoubtedly, seems to be the wise direction. A policy which puts strongly in the forefront drawing, design, and the theory of structure with the all-important functioning of the artist through these—can alone maintain a school of architectural studies at Cambridge in a proper position.

The school is still young in the provision of personnel for the production of efficient design work. This will come, however, and it will be encouraged by the growing respect which the other departments of the University have for the serious content of architectural study; it is safe to state that the school is steadily getting on to a really sound foot-ing in University affairs. There may, of course, be difficulties at Cambridge in maintaining a standard of design production from the standpoint of the other premier schools of architecture. It is necessary to have regulations for university courses, all the more so when they are dovetailed into other courses through the medium of the principal subject, in this case the history of art; but regulations do not make artists, as the educational side of the R.I.B.A. has realized for a long time. It is not, perhaps, so much a question of what can or cannot be achieved at Cambridge as the fostering of a spirit of seriousness in work at the architectural school, which will sensibly bear comparison with the standard of the honours degrees. It can only be attained by keenness and enthusiasm for a particular subject, which can be produced in the undergraduate if he knows that he is getting to the heart of that subject. In architectural study all architects worthy of the name realize that design is this heart, and it is the master's aim to bring all subjects of study at Cambridge into the production of a sound attitude to design-the realization that the fully-worked-out small-scale drawing is not only the beginning but the beginning of the end, instead of something that is thrown into the wastepaper basket after the first essay. There is a great deal in all this that may be made common to the University as well as to the school ; already

there are signs that an intelligent outside appreciation of architecture is growing both in quantity and quality.

The school is in process of going into new premises, where more can be done, and where more room can be obtained for its growing numbers. It has a lot to learn from what is being done in other schools. The wise outlook of the Board of Architectural Education towards a common interchange of ideas cannot be too highly commended. In time, it may be, other schools may learn something of positive value from Cambridge. In particular, one feels that a sound study of mediæval architecture may be produced there. The principle of selection of a special subject in the history of art is one which it is good to see is now being taken up by some other schools.

One does not need to confess to any disillusionment in realizing that it is impossible to run a school of architecture at Cambridge on exactly similar lines to other architectural schools throughout the country; rather the reverse. Men come up to Cambridge (as to Oxford, but nowhere else in England) primarily to be at Cambridge. There they live for three or four years the life of Cambridge, and do a great deal that is not of the workshop or of the drawing-office. They need not, in fact cannot, master the full routine of a specialized training, but they ought to be permitted to get a wide view of the possibilities of such a training. This must come after the public school, and be a stepping-stone to the world of affairs; but one must realize from the place that Cambridge must occupy in the life of a young man who goes there, that any post-graduate course in architecture is not easily practicable within the main stream of university life.

Another aspect deserves serious consideration—the possibilities of the vacations. These are long at Cambridge, particularly the long or summer vacation. Residence is not compulsory during this time, but it contains a sixweeks' term nevertheless, and an encouragement towards studio work in it will be earnestly taken up. The long vacation term is really the best of all for serious study, as the thousand and one distractions of full term time are reduced to a minimum. It offers an admirable opportunity for sketching and measuring the fine buildings of Cambridge, with the school as a centre.

Finally, a word should be said about the standard of the degree in architecture, and the type of man who has so far come up to take that degree. There are three examinations, one in each year, and there are first, second, and third grades of passing in these. Though examinations are by no means an infallible test, a good first ought to mean more than a bad third. This will give food for thought in the future, particularly in relation to that other accepted test —the intermediate of the R.I.B.A., to which the curriculum of the Cambridge school broadly corresponds, though with a higher standard in history. At present it may safely be said that any student who obtains a first in all of his three examinations in architectural studies has achieved a standard of output in work which is quite comparable to that of an honours degree.

The men, as to type, are varied and interesting. Naturally, there is an admixture of the ordinary undergraduate who does not know his own mind clearly, and has no particular ability. This type may find itself weeded out more and more. But, fortunately, exceptional material comes up as well, in the sons of painters and architects, and in men who are exceptional enough in themselves. The old question—that of running for the average or running for the few—is bound to crop up, and will be dealt with more satisfactorily when the existing regulations come to be revised, as the inevitable result of a fuller school life.

The University of Manchester School of Architecture

Professor of Architecture, A. C. DICKIE, M.A., F.S.A., A.R.I.B.A.

OTWITHSTANDING the great strides made within recent years we are still seeking a solution to the problem of how to educate the architect. The steadily rising status of school training owes much to the fillip it received by the R.I.B.A. exemption for fifth-year graduates. Five years is the minimum period within which a system of architectural education could be tested, and students quickly realize the advantage of this extension apart from the facilities offered in respect of the R.I.B.A. final examination.

Adverse criticism of school-trained draughtsmen comes readily from the lips of those who assess the products from the viewpoint of the old pupilage system. At that time home-trained junior draughtsmen could be trusted, in due course, to interpret correctly the ideas of their chiefs; an achievement which it was quite reasonable to expect. In the opinion of the chief, this may have been quite satisfactory, but it does not necessarily follow that architecture was any the better for it. No system could cater for such an unknown quantity, and curricula are therefore formulated on a much higher level.

The R.I.B.A. Board of Architectural Education are making praiseworthy efforts to bring all recognized schools on to an accepted standard. At the present juncture, however, it would be unwise to be meticulous in standardizing methods, since our educational system is largely experimental. Even casual scrutiny reveals characteristics, good or bad as the case may be, which are a direct result of comparatively slight variation in the curricula of schools, and which may bear little or no relation to the quality of the teaching. Methods which show successful results in one item of the curriculum may do so at the expense of some other important item. A number of schools may each be distinguished for particular items, but an aggregate is needed to make a commendable whole. In golf language, their best ball should turn out about par. Getting well off the tee is only one thing, there are all the other shots to follow.

What education aims at is to find a way to stimulate the building sense so that the designer may think in terms of materials rather than in style. It aims to infuse a catholic taste; an open mind tempered with respect for laws of construction, and restraint and propriety of design.

It is how best we can do this which concerns us. Shall we, as we are sometimes urged, set out with vaguely understood ideals expressed in unintelligible jargon without supplement of the tangible in the form of executed examples? And will the master be boid enough to forthwith put his ideals on paper so that all can see and emulate? He will do well to refrain from such adventure lest his criticism becomes unconvincing and he falls embarrassed by his own logic.

It is much more sound to set out with a close adherence to tradition, keeping always before the student the reasons for the existence and perpetration of its forms. Here are things he can see and feel; things he can understand, the work of men whose spirit he can in a measure become possessed of. Creative power cannot be taught, but education can nourish it by keeping in the forefront the phases through which the great architecture of the past proceeded to perfection. It is the period of history anterior to culmination which teaches us most.

If for no other reason than that of expediency, the classic tradition is the most amenable to educational service.



UNIVERSITY OF MANCHESTER SCHOOL OF ARCHITECTURE. A DESIGN BY REGINALD J. WILLIS (FIFTH - YEAR STUDENT).

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UNIVERSITY OF MANCHESTER SCHOOL OF ARCHITECTURE. STUDY BY L. S. JACOBSON (FIRST-YEAR STUDENT).

Unlike Gothic, there is nothing mysterious about it. It stands there with its comparatively simple accompaniment, and is acceptable for more reasons than one. It is more easily understood, more easily drawn, and more easily constructed. It is more simple, and calls less insistently for the infusion of spirit and grace. It dovetails more effectively the capabilities of both master and student.

To discuss methods more definitely. In the first place let the school library be as comprehensive as possible. In the initial stage let us aim to nurture, in the mind of the student, a sense of fundamental values and reasons broadly expressed in general history of architecture and building construction, co-ordinated with studio work in elements of architecture. Later apply technique and theory in composition by assembling parts into simple structural groups. In the earliest stages of drawing emphasize the value of showing constructional jointing so as to develop the faculty for thinking and drawing in terms of building.

Lectures on special periods of architecture, classical sculpture, and Italian mural painting continue the archæological aspect of the work, while building construction and hygiene keep the practical needs of his art before the student. Drawing proceeds *pari passu* with the other studies. The teaching of drawing is directed towards the illustration of architecture in the peculiar manner best suited to that purpose. It is borne in mind that the free and full handling of media must eventually be subordinated to exactitude, which is often irksome to the accomplished graphic artist. The claims of working drawings should be demonstrated so as to keep the *object* of the drawing in the forefront. Throughout the full course freehand, antique, and life drawing are taken in the usual sequence.

In the latter half of the course, in addition to the larger set subjects of design, quick sketch subjects are set coordinating with lectures on theory of design. Preparation of working drawings and details forms an important part of the course. Building construction passes through its various stages to steel and ferro-concrete at the end of the third year. In the following years construction tutorials are given on the problems arising out of the designs being worked out in the studio.

Cardiff Technical College Head of Department, W. S. PURCHON, M.A., A.R.I.B.A.

HE Department of Architecture and Civic Design in the Technical College, Cardiff, was opened in March, 1920, and has thus been at work rather more than four years. The Principal of the college is Mr. Charles Coles, B.Sc, and the Head of the Department of Architecture and Civic Design is Mr. W. S. Purchon, M.A., A.R.I.B.A., who was previously in charge of the Department of Architecture in the University of Sheffield. Mr. R. H. Winder, M.A., A.R.I.B.A., is the assistant lecturer in architecture, while Mr. Lewis John, B.Arch., A.R.I.B.A., has just been appointed to succeed Mr. E. C. R. Page, A.R.I.B.A., part-time assistant lecturer, who was appointed to that post at the beginning of last session

appointed to that post at the beginning of last session. Mr. Percy Thomas, F.R.I.B.A., President of the South Wales Institute of Architects acts as design critic, and Mr. T. Alwyn Lloyd, F.R.I.B.A., assists the head of the department in giving the course of instruction in town planning. Mr. Percy Thomas, F.R.I.B.A.; Mr. H. Teather, F.R.I.B.A.; Mr. T. Alwyn Lloyd; and Mr. J. H. Jones, F.S.Arc., of Swansea, are honorary lecturers in modern architecture, and the panel of honorary lecturers in professional practice consists of Mr. Percy Thomas, F.R.I.B.A.; Mr. Ivor Jones, A.R.I.B.A. (Hon. Secretary of the South Wales Institute of Architects); Mr. H. Teather, F.R.I.B.A.; Mr. T. Alwyn Lloyd, F.R.I.B.A.; Mr. T. Alwyn Lloyd, F.R.I.B.A.; Mr. J. H. Jones, F.S.Arc. (Swansea); and Mr. A. L. Thomas, F.S.I. (Pontypridd).

In arranging the syllabus, good use has also been made of the other departments of the college, which provide instruction for the students of architecture in such subjects as mechanics, material testing, and other engineering



CARDIFF TECHNICAL COLLEGE: DEPARTMENT OF ARCHITECTURE AND CIVIC DESIGN. A DESIGN BY W. O. OAKLEY.

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laboratory work, the chemistry of building materials, and drawing of architectural ornament, antique, and life.

The department was opened with the object of providing systematic full-time architectural education for Welsh students, for whom Cardiff is not only a particularly convenient centre, but one whose civic, county, and national buildings give it a special claim amongst Welsh towns as a centre for architectural training.

The Technical College in which the department is housed was designed by Messrs. Ivor Jones and Percy Thomas, of Cardiff, and is one of the buildings which form the wellknown group in Cathays Park. The course of instruction is on somewhat similar lines to those adopted in the older schools; a full-time course of three years' duration being followed by a two-years' course, in each year of which the students spend six months full-time in the college while the intervening period of six months is spent in architects' offices. The college certificate is awarded at the end of the third year; the final two years leading to the diploma.

Special day courses are also available for students who have already passed through three years articles or other approved training.

Pupils who are at present in architects' offices, and others who are unable to take a full-time course of study may attend part-time at the School of Architecture, and take approved parts of the full-time course.

For architects' assistants an evening atelier has been provided, the scheme for this being so devised that assistants may work on problems varying in degrees of difficulty.

Although these various part-time courses are available, they are not allowed in any way to interfere with the development of the full-time day course, as it is fully realized that by considering this the fundamental scheme, the cause of architectural education in Wales will be served to the best advantage.

The school aims at providing a sound, well-balanced, systematic training; it endeavours to avoid the development of one side at the expense of another; it is broad rather than narrow; it seeks to harmonize the claims of utility with those of beauty; it believes that a careful and critical study of the best solutions of old problems is a good start towards the solution of the problems now before us.

In the first year of the course the students study ancient architecture in some detail, together with the outlines of Mediæval and Renaissance architecture. They make drawings of the Greek, Roman, and Renaissance Orders and other features, finishing one or more of these as rendered compositions. Architectural perspective and sciography, the construction of a small building including the preparation of a set of working drawings with full size details, applied mathematics, and the drawing of Greek and Roman ornament from the cast are also included in this course.

Special features of first year work are memory drawing of the Orders, etc., and a general reading course. The latter is an innovation—it consists of a course of reading from recent authors undertaken at home, the object being to help the student to keep in touch with modern movements other than architectural ones.

In the second year, the history of architecture course covers English mediæval work, and the Renaissance in Italy, France, and England. More advanced constructional work is taken at this stage including calculations of structures. The students begin design in this year, working a series of elementary problems, and studying the elements of design. They also attend a course on the chemistry of materials, a laboratory course in mechanics and material testing, and a course of drawing of architectural ornament in light and shade.

In the third year a course of lectures on modern architecture including the theory of design and planning is taken, and the students prepare a series of designs, one of which is normally completed as working drawings. Constructional problems of increased difficulty are tackled, and the materials of construction and elements of sanitation are also studied. The students also take a course of drawing from the antique at this stage. During the diploma course (fourth and fifth years) more advanced architectural design is undertaken, together with the preparation of working drawings, the study of steel construction, reinforced concrete, sanitation (including heating, lighting, ventilation, etc.), specifications, contracts, and professional practice, an advanced course in materials and drawing from the antique and life. A special course in civic design—the history and practice of town planning is taken in the fourth year.

During the whole five-years course, terminal and sessional examinations are held in each subject, the external examiner being Mr. Paul Waterhouse, F.R.I.B.A.

While the students during vacations naturally go further afield for the purpose of architectural sketching and measuring, and in this way have done useful work in various English centres such as Cambridge, Bath, and London, and in Italy and France, the buildings in Cathays Park are particularly useful for this purpose during term time, and are of great value in giving a modern touch to work of this character. Visits to buildings in course of erection, to workshops and to brick works, cement works, etc., are arranged from time to time.

The department is in very close touch with the South Wales Institute of Architects, which elects representatives on the advisory committee on architectural education. The Institute has also appointed its president, Mr. Percy Thomas, F.R.I.B.A., to act as visitor in connection with the atelier. The library of the Institute has been placed in the school on permanent loan, and in addition to prizes given by local architects as individuals, the students compete for prizes awarded by the Central Branch of the South Wales Institute.

Open scholarships, covering tuition fees and maintenance grants of £40 per annum for three years are offered for competition annually.

The School of Architecture Club is an energetic association of students of the school and other student members of the South Wales Institute of Architects, Central Branch. In addition to occasional lectures, the club arranges an annual outing and other social activities, the annual school dance being a particularly successful function.

The Cardiff School of Architecture is making a determined effort to fill adequately a long-felt want in professional education in Wales. It draws its students from a very wide area in the Principality, and in addition to a number of part-time day students and assistants attending the evening atelier, there are at present eighteen full-time day students in the school. Five students were awarded the certificate in June, 1923, another five were awarded it in June, 1924. Five students are qualified to take the fifthyear course, which will be started next session, when, for the first time there will be available in Wales a complete five-years course in architecture.

It is the hope of the school that those who pass through it will not only develop their abilities in design and draughtsmanship and acquire useful knowledge of the art of architecture, but also that they will leave the school with a lasting enthusiasm for architecture, which in various direct and indirect ways will be a valuable asset to the Principality.

The Cardiff school aims too, not only to give a sound and generous training to professional students, but also to give to others opportunities for the understanding and appreciation of architecture and town planning, fully realizing that only with a backing of well-informed public opinion can these arts develop to the full. With this object in view various articles emanating from the school have already appeared in the local Press, and a considerable number of lectures have been given to University and high school students and to the public.

The Cardiff School of Architecture is being encouraged by the support given to it by the South Wales Institute of Architects, and by the R.I.B.A. (which has "recognized" its certificate course), in the belief that it is doing serious and useful work, but it is anxious to do still better in the interests of architectural education and of architecture in Wales.





THE ROYAL WEST OF ENGLAND ACADEMY SCHOOL OF ARCHITECTURE. A DESIGN BY F. BEECH WILLIAMS,



THE ROYAL WEST OF ENGLAND ACADEMY SCHOOL OF ARCHITECTURE A DESIGN BY F. BEECH WILLIAMS

The Royal West of England Academy School of Architecture

Master, G. D. GORDON HAKE, A.R.I.B.A.

HE growth of this school of architecture since its formation three years ago, has been most marked. With its headquarters in the Royal West of England Academy, Bristol, the school is controlled by practising architects, as is the Architectural Association School in London, to which this school is affiliated. Founded early in 1921 by the Bristol Society of Architects, the school was officially opened by, the Prince of Wales in June of that year.

For the first year the work of the school was directed by Mr. H. Chalton Bradshaw, A.R.I.B.A. (Rome scholar), who visited the school weekly from the A.A. Schools in London. The school owes much to this pioneer work of Mr. Bradshaw. His successor as a visiting master from the A.A. Schools, Mr. H. Gordon Holt, A.R.I.B.A. (Tite prizeman), whose enthusiasm did much to develop the imagination of the students, was in charge until the summer of 1922.

At this stage the school council decided that the progress and future development demanded the appointment of a The beginning of the session 1923-24, resident master. therefore, marked a definite phase in the development of the school; Mr. G. D. Gordon Hake, A.R.I.B.A., for some years on the staff of the A.A. Schools in London, was appointed resident master, and this closer association with school council committee and students has resulted in a well-defined and continuous policy of work. The teaching staff was augmented at the beginning of the session 1924-25 by the appointment of Mr. Eustace H. Button, A.R.I.B.A., who, as senior student of the school gained the Dame Janet Stancomb Wills Travelling Studentship last year, and has just gained the Ashpitel Prize with distinction in Thesis in last year's R.I.B.A. final examination. The advisory director of education is Mr. Robert Atkinson, F.R.I.B.A., director of education at the Architectural Association, London.

It is the aim of the school to further the interests of architectural education in the West of England, not so much by training clever draughtsmen as by providing that fundamental instruction and discipline in the art, science, theory, and history of architecture, which, supplemented by practice in an architect's office, shall qualify the student for the independent practice of his profession. This educational experiment is of particular interest as it is an attempt to combine the system of pupilage with the modern methods of architectural education, without an undue amount of evening work. At present the student, on signing his articles, enters the school in the preliminary course. He devotes about onequarter of his time to the school and three-quarters to the office. In some cases the student spends a greater percentage of his time at the school. Thus, with the exception of whole-time students, the practical work in an architect's office enables the student to concentrate more particularly on the theoretical and more academic side of his training.

The official hours of the school are from 2 p.m. to 6 p.m., but as is natural with keen students who wish to take the fullest advantage of an academic training, the studios are the scenes of industry and mutual intercourse in varying degrees throughout the day. Lectures are delivered three times a week from 6 p.m. to 7 p.m.

The Curriculum comprises two courses : (a) Preliminary; (b) Advanced; and each course is sub-divided into two grades.

The following prizes and studentships are offered :--

Advanced Course.

The Dame Janet Stancomb Wills Travelling Studentship to the value of f_{25} .

Architectural Association Design Prize of £5.58

Royal West of England Academy Silver Medal and B.S.A. Prize of $\pounds 3$ 3s.

Savory Design Medal.

Master's Prize of f_{22} 2s. for the most marked progress during the year.

Preliminary Course.

Royal West of England Academy Bronze Medal and B.S.A. Prize of £2 28.

The fees are $\tilde{\pounds 6}$ 6s. per term.

There are three terms in the year, each of twelve weeks, winter, spring, and summer.

Socially the school is properly active. The Students' Club, of which every student of the school is a member, exists for the purpose of bringing the students together for mutual help and recreation. Meetings are held once a fortnight, at which papers are read by individual members, followed by general discussion. During the summer, the club arranges excursions for measuring and sketching, and provides sports. The annual fancy dress dance at the R.W. Academy is the chief social attraction of the winter. There is a splendid spirit of co-operation in the general running of the school—such offices as librarian, caterer, stores manager, and many others, being undertaken by the students.

Sheffield University, Department of Architecture

Lecturer, C. D. CARUS-WILSON, M.C., F.R.I.B.A.

T is doubtful whether the small schools of architecture which have exemption only from the R.I.B.A. intermediate examination will be able to survive in competition with the larger schools, in which the junior students can look forward to a continuation of their studies in the fourth and fifth-year courses ending with exemption from the R.I.B.A. final. The Department of Architecture of the University of Sheffield is one of these smaller schools, where the paucity of students is traceable directly to the depression in trade, and the consequent hesitation of parents to place their sons in a profession whose activities will for some time to come be almost at a standstill.

The few students, however, who attend this school have the advantage of the more personal attention and a greater amount of individual instruction than can be given in the larger schools. The examples which are now published of the work of this school show throughout a close combination of the academic and the practical. The objection so often brought forward against schools of architecture by the advocates of the old method of pupilage is that the schools inflate the students' minds with absurdly imaginative and unrealizable ideals and turn them out into their professional careers unfitted to grapple with the tedious and restricted problems of ordinary practice. That such a





charge cannot be brought against the Sheffield school will be clear to anyone making an inspection of its students' work, some twelve examples of which are exhibited in the galleries of the International Congress.

It has been ceaselessly impressed upon the students that construction and design are one, and indivisible. In the teaching of the history of architecture the chief object has been to show how each succeeding style has been influenced by those preceding, and how the best modern work has in every case obtained its inspiration from a deep study of impossible. The structural details have been studied down to the calculations for the actual steelwork, which would be put into such a building. This work can hardly be regarded as the original design of the student, as it has been constantly supervised and altered by the lecturer; but as time goes on and the student shows himself more capable, the lecturer will permit him more freedom.

The motto set before the students is : "Study, assimilate —and then produce." Not merely the fashionable Classic, but the Gothic must be studied; not merely the various



DEPARTMENT OF ARCHITECTURE, SHEFFIELD UNIVERSITY: A DETAIL OF DRONFIELD CHURCH, MEASURED AND DRAWN BY ERIC W. CHAPMAN

the past. Names and dates do not interest students; evolution does.

Two of the selected drawings show an exercise in the elements of Renaissance architecture, combined into one composition, with the application of one of the orders of architecture to a building. The subject given was the front portion of a city bank building, in which the student has learned how to combine doors, windows, walls, cornices, and interior features with full knowledge of their construction, without which their proper æsthetic treatment is forms, but the methods of producing those forms. So do they learn to express themselves as it were, in different languages, and in dealing with a new material they perceive how best to fashion it. In studying the ancient work and the solution of its problems they learn the underlying principles which will solve all problems.

Imagination can be fed, and enthusiasm is contagious; soon there becomes apparent in the student an appetite for creative work which sometimes surprises yet delights the lecturer in architecture.

Department of Architecture and Civic Design, Leeds School of Art

Head of Department, JOSEPH ADDISON, A.R.I.B.A., A.T.P.I.



A DESIGN BY G. ALAN BURNETT.

The Department of Architecture and Civic Design of the Leeds School of Art was founded in 1902 by the Leeds Education Authority under the patronage of the Leeds and West Yorkshire Architectural Society. In 1915 the department became a recognized school by sanction of the Board of Architectural Education, and students passing successfully through the prescribed course are exempt from the intermediate examination of the R.I.B.A. In 1922 a diploma course was established, on the successful completion of which students are awarded the diploma of the School of Architecture.

During recent years the scope of the department has been much enlarged to cope with the great increase in numbers, and the more advanced methods of education now prevailing. The old method of teaching architecture by means of studio criticism alone has been superseded by a more positive method of training, consisting of carefully graded lecture courses on the various subjects, amplified by thorough and intimate tuition in the studio. It is the aim of the department to provide all students possessing reasonable ability with a sound knowledge of the artistic and structural aspect of their profession, and equip them to attain assured positions in the profession.

Due consideration is given to each student's requirements and natural bias, and his course adjusted accordingly, once he has had a thorough grounding in all essential subjects.

Special consideration is given to the study of stereotomy, both in regard to its architectural and constructional significance. Difficult features are modelled by the student in order that he may visualize these in the solid. Likewise, complex problems in construction, often poorly realized by the student on plan and section alone, are more clearly studied by means of built-up models. The study of construction is blended with that of design, constructional detail drawings of each design subject of more than two weeks duration being prepared simultaneously with the development of the whole scheme.

To ensure unity of thought and aim in the various

branches of study, frequent staff conferences are held between the head of the department and his instructors. Programmes are thus arranged, so that the required type of study is provided for each class, and co-ordination maintained.

The school is in the unique position of having, in addition to a fully qualified architectural staff, the services of the building department of the Leeds Technical School, with its demonstration rooms and laboratories; while such subjects as freehand, antique and life drawing, colour decoration, and modelling are studied in their particular departments in the School of Art. The personal study of individual buildings, by means of measured drawings and sketches, must be undertaken by all students attending the day school and every facility is given in this regard.

For the benefit of pupils and assistants in architects' offices, part-time day and evening courses are held in the department. These courses are conducted separately from the full-time courses, which form the main section of the department, and will grow smaller as the profession realizes the importance of every entrant receiving a complete school training prior to entering the practice of architecture. Until such an understanding is reached these courses fulfil a valuable service to the profession.

Monthly design subjects have been instituted, consisting of a twelve-hour esquisse conducted "en loge" on which a criticism is prepared by a jury composed of members drawn from the Council of the Leeds and West Yorkshire Architectural Society and the staff of the department.

There are many valuable scholarships and travelling studentships available to students of the school, including amongst the latter one to the value of £60 for travel abroad.

On the social side, there are many activities to interest the student. The organized sports include cricket, football, and tennis, for which a grant of f_{10} per year is given by the school authorities. There is also a school sketch club, which holds in addition to numerous outings, an annual exhibition and prize giving.



ARCHITECTURAL DEPARTMENT, LEEDS SCHOOL OF ART A DETAIL BY G. ALAN BURNETT.



ARCHITECTURAL DEPARTMENT, LEEDS SCHOOL OF ART. WORKING DRAWING BY G. ALAN BURNETT.

The School of Architecture, Central School of Arts and Crafts, Birmingham

Director, GEORGE DRYSDALE, F.R.I.B.A.

HIS school was founded at the instigation of the Binmingham Architectural Association in 1909, under the directorship of Mr. W. L. Ball. The course was spread over four or five years, the first two of which attendance during the day was required as a preliminary to articled pupilage, the latter three years consisting of evening classes running concurrently with pupilage. Abandoned during the war, the school was reopened under Mr. W. H. Bidlake, in 1919, and the school course altered to a three-year one. Two years, all day, and the third year mornings only, the afternoons being spent in the office in which the student was serving as an articled pupil.

The R.I.B.A., at the beginning of the past session, agreed to class the school among those recognized by their Board of Education as far as exemption from the intermediate examination was concerned. A diploma or pass into the students' class at the Institute is now granted by the school to those students who satisfy the examiners at the end of the three-year course. It is also hoped in time to institute a course for the full five years recommended by the Board, meanwhile, fourth- and fifth-year men are advised to continue their studies in London or other centre where full-time courses are organized.

Centrally placed in the city, the school is very conveniently situated for those students who, living in the Midlands, wish to take up architecture. The fees are moderate, and the accommodation ample for the needs of a large number. The library of the Architectural Association is free to the students, as is the large library of the School of Arts and Crafts; exceptional opportunities of meeting and mixing with students of the various crafts closely allied to building are open to those who wish so to avail themselves. The staff consists of five practising architects, besides various teachers of modelling, stone cutting, watercolour, and life drawing, etc., engaged in the school. In addition, the senior men are expected to attend lectures on town planning given by Mr. William Haywood at the University of Birmingham. An evening school of building and design is attended by fourth- and fifth-year students, who elect to enter offices instead of going through the full course recommended by the Institute.

The sketching and measuring of existing buildings is encouraged whenever possible, one week in the summerterm being set apart for this work. Tewkesbury was the town selected during the past session. The course at the school generally follows the curriculum approved by the Institute. Great importance is placed on giving the student ample opportunity of gaining a sound knowledge of the technique and of the practical side of his work. The school is very fortunate in having in Mr. Bidlake an exceptional lecturer on architectural history. In design the aim is to give the designer every freedom controlled by a certain amount of common-sense, practical and emotional planning being judged of primary importance, while design is considered as an arrangement of patterns in space, of void and solid, colour, texture, light and shade, rather than an adaptation of historic styles. Finally, every effort is made to avoid the standardizing of the individual's point of view.

Robert Gordon's Colleges, Aberdeen, School of Architecture

Principal Teacher, R. LESLIE ROLLO, A.R.I.B.A.

HILE the construction embodied in any building is only a means to an end, one great danger, evident in schools of architecture, is that of keeping architectural design and con-

struction too far apart. The nearer these can be brought to one another the better. In the Aberdeen School an attempt is made to bring these two subjects close together, and the student, through the six years of the course, is advised, if not driven, to consult the teacher of construction about the problems which occur in his designs. While students ultimately fall into two main classes, i.e., those who specialize in design and those who specialize in construction, this training ensures that all can appreciate the space required for any ordinary form of construction and can make provision for those small details which are so often overlooked.

In the subjects of the ordinary school curriculum an attempt is made to sustain the interest of the student by variety of problem; and by permitting them to elaborate, or over-elaborate, draughtsmanship and add what is more often mistaken colour. Discipline is got by holding the student to his first idea, and in the working out of designs confined to certain historical periods.

During the ordinary school year three main problems in design are worked out. The first deals mainly with planning, the second with external effect, and the third with the grouping of buildings. Concurrent with these are "sketch designs," which deal with the details of monumental architecture, "historical designs" in conjunction with history of architecture, and "constructional designs" in conjunction with building construction. Appreciation of form and its subtleties are cared for by a long course of free drawing, while outline and effect are related by compulsory measured work.

Building construction is taught by lectures and by copying details in the first instance, but from the second year of the course the student has to embody his knowledge of construction in finishing one of his designs as working drawings, with special reference to scale details. Not only does the student relate design and construction in the school, but, as he spends his days in an office during the third, fourth, and fifth years, he has early opportunity to check and apply this knowledge to the problems of the office.

It is not suggested that this type of training, which includes day and evening classes, is without fault, but it does away with the "half-time" man who spends all his energies in an office and uses the school as a resting-place, or vice versa. It is of the utmost importance to train the student to see, not only the end of an architectural scheme but the means to the end. To such is opportunity given.



BIRMINGHAM SCHOOL OF ARCHITECTURE. DESIGN BY J. R. F. JORDAN.



BIRMINGHAM SCHOOL OF ARCHITECTURE. DESIGN BY WALTER WATSON;



ENTRANCE FRONT



BACK ELEVATION



ABERDEEN SCHOOL OF ARCHITECTURE. DESIGN FOR A UNIVERSITY LIBRARY. BY LEO DURNIN (FIFTH-YEAR STUDENT)

The Glasgow School of Architecture

Director of Studies, T. HAROLD HUGHES, F.S.I., F.R.G.S., A.R.I.B.A., A.R.C.A.(Arch. London)

HE Glasgow School of Architecture, as now organized, was established in 1904. Prior to this two schools of architecture flourished in the city, one in the School of Art and one in the Royal Technical College. The former was established in 1868, and it was here that W. J. Anderson, of Italian Renais-sance architecture fame, lectured from 1896-99. The first recorded classes in the Royal Technical College date from 1888. For greater efficiency the governors of the Technical College and of the School of Art proposed the amalgamation of the architectural departments of the two institutions. The late Professor Eugene Bourdon (who, for this purpose, was recommended by the late M. Pascal) was invited to Glasgow to report upon the schools and their development. This report was prepared in 1903, and Professor Bourdon's scheme for drawing together the work of the two departments was adopted, Bourdon being appointed the first director of the Glasgow School of Architecture in 1904. Whilst this school became one corporate body, the excep-tional resources of the Royal Technical College and the School of Art were still fully utilized and the school rapidly and successfully developed.

Three alternative courses of study are provided in the Glasgow School of Architecture, the Degree course, the Diploma course, and the Certificate course.

I. The Degree course has just been established, the Technical College being affiliated to the University. It is of four years' duration, and leads to the degree of B.Sc. in architecture with honours in (a) architectural design, or (b) construction. After passing the final examination, but

before the conferring of the degree, the candidate must produce evidence of actual practical experience in architectural work.

2. The Diploma course. For this course the minimum attendance in day classes is three years, but this has to be supplemented by two or more years' attendance in evening classes, which are taken whilst the student is gaining practical experience in an office. The diploma of the school gives exemption from the Final Examination of the R.I.B.A., except as regards the subject of professional practice.

3. The Certificate course. This may be taken in evening classes only, which, after a preliminary course in affiliated classes, are of five years' duration. The certificate gives exemption from the R.I.B.A. Intermediate Examination. After gaining this exemption students may take special classes in preparation for the R.I.B.A. Final Examination.

In all the courses the main subjects of design, construction, and history are correlated. In architectural design three subjects are set in the session, to the solution of each of which nine weeks is given. In addition to these main subjects, time sketches, each of five hours' duration and four in number, are set at intervals in the school year. At the conclusion of each of the design subjects an exhibition of the work is held, and a criticism given by either a member of the Glasgow Institute of Architects, or a visiting architect. Certain of the designs are completed as working drawings in the constructional course, which is of four years' duration. This course includes both lecture courses and class work. The work ranges from the elementary



GLASGOW SCHOOL OF ARCHITECTURE: DESIGN FOR A LILY POND BY F. R. WYLIE.

details of construction in the first year to advanced problems in stone, steel, and concrete in the fourth.

A general course of fifty lectures on the history of archi-tecture is given in the first year. In the subsequent years the work is specialized, the subject for the second year being Mediaeval, third year Renaissance, and fourth year Classic architecture. The work generally involves problems of restoration and individual research. In addition to the above subjects, which extend through the whole course, classes are held in mathematics, mechanics, drawing, reinforced concrete construction, town planning, and municipal engineering, etc. In the summer session special classes are held in chemistry, geology, etc., and in surveying and levelling. In the Technical College and in the School of Art classes are taken in drawing, modelling, and colour decoration. Architectural measuring and sketching are also taken each year in the summer.

The school has a School of Architecture Club which each year arranges a course of lectures, the greater number being given by its own members. The club arranges the annual dance, and has its games committee. The school has also the advantage of membership of the Architectural Craftsmen's Society, and the club is co-ordinated with the students' section of the Glasgow Chapter of the Incorporation of Architects in Scotland.

Until the year 1914 the School of Architecture Club pub-lished its own magazine, "The Vista." The work of "The Vista" is now being continued in the students' section of the "Quarterly Journal" of the Incorporation of Architects in Scotland.

The International Congress : The Remaining Fixtures

Wednesday, July 30. In the morning papers on architectural education in the present in America, France, Italy, and England will be read and discussed. In the afternoon members will assemble at the R.I.B.A., and will be conveyed to Lambeth Pier, where they will embark on a private steam launch and proceed to Greenwich by river. Tea may be obtained in Greenwich Park. Members will then return by steamer. The cost of this trip will be Ss., excluding tea.

trip will be Ss., excluding tea. Thursday, July 31. In the morning members will meet at the R.I.B.A., when papers on architectural education in the future in America, France, Italy, and England will be read and discussed. In the afternoon a visit will be paid to the British Empire Exhibition at Wembley. The party will be conducted round the exhibition by Sir Lawrence Weaver, Director United Kingdom Exhibits, Sir John Simpson, and Mr. Maxwell Ayrton. Tickets 3s., including admission to the exhibi-tion tion

In the evening the congress banquet will take place at the Hotel Victoria, Northumberland Avenue, S.W. Tickets 125. 6d., exclusive of wines; 325. 6d., inclusive of wines, etc.

Friday, August 1.

The day will be devoted to a visit to Cambridge. Members may proceed to Cambridge by motor or by rail. Luncheon will be served in the Hall of Gonville and Caius College. The Cambridge School of Architecture and other places of interest in Cambridge will be visited during the day. Arrangements will be made for tea.

The inclusive charges in connection with this trip	will	be as	follows :
Motor, luncheon, and tea ticket		325.	od.
Rail (3rd class), luncheon and tea ticket		135.	IId.
Rail (1st class), luncheon and tea ticket		185.	6d.
Saturday August 2			

Saturday, August 2. The following conducted visits have been arranged :— Westminster Abbey, by Professor W. R. Lethaby. St. Paul's Cathedral, by Mr. Mervyn Macartney. The City Churches, by Mr. Arthur Keen and Mr. Arthur Stratton. The British Museum, by Sir John Burnet.



GLASGOW SCHOOL OF ARCHITETCURE: DESIGN FOR A LIBRARY. BY F. R. WYLIE.



TWO AIR VIEWS OF THE CAMBRIDGE COLLEGES. (Cambridge is to be visited by Members of the Educational Congress on Friday next.)

Contemporary Art

Venice and the Riviera.

At the Beaux-Arts Galleries Knighton Hammond is exhibiting fifty drawings in water-colour, many of which are architectural. They are often vague and generally blottesque, but always pleasurable in colour. Their author has noted the general effect of the impressions the buildings made on him without troubling to realize their value as such. For instance, "Parliament Street from Trafalgar Square" is empty, and yet it has interest, for in point of fact Knighton Hammond is so good a colourist that his draughtsmanship takes second place. The colour of "The Loggia dei Lanzi," and "The Uffizi Gallery" is quite satisfying, as is also that of "The View from the Colleoni Statue, Venice," while "Raglan Castle" and "Near Ponte Vecchio, Florence," are altogether charming. Most of the landscapes are very good, for in these the architectural features are merely accessory. This is the first exhibition of the artist's work in London, but he is very well known on the Continent, where he has had a number of shows from time to time. Two drawings at San Remo, and the "Parliament Street," have been bought by Sir Joseph Duveen for the national collections.

A One-woman Show.

Mrs. Alec-Tweedie is untrained as an artist, but her powers of observation are of the best. She has travelled generally all over the world, but with an eye that has never missed the particular. In the 400 drawings at the Alpine Club Gallery she has succeeded in placing the salt on the tail of every bird she has caught. She has shied at nothing : men and women, national characteristics, landscapes and seascapes, river, road and rail, architecture-all have been caught in her snare. She has courage, and as I have said, observation, and yet but little insight. Her drawings are of things seen rather than things felt or thought about. They are illustrative, topographical, and never other than courageous. She has apparently seldom considered impossibilities, for she seems insensible to them as she is to the nuances which go for so much in drawing. Her fertility is astonishing, and her zest for pictorial note-taking of the fullest, and the results, devoid as they are of real artistry, either in colour or draughtsmanship, are never other than interesting and valuable. As examples of the most successful of her studies I recall "St. Mark's Square, Band Night," the "San Remo Old Gate," the "Etruscan Arch, Perugia," the charming group of buildings in "Washing Corner, Annecy," and another at "Montrico, Northern Spain, the Sardine Village."

An Unusual Show.

At the Attic Club, 43 New Bond Street, there are medals and bronzes as well as pictures and water-colour drawings. The show is small but varied, and there is nothing in it but what has some sort of distinction. The silver medals are by John Pinches, himself a medallist, and not a mere modeller for medals, who also shows more than one picture; the bronzes are by Charles Sykes, small and delightful intimate pieces for the cultured home, and their maker is also a painter. Among those who exhibit pictures and drawings is Alexander Jamieson, whose "Buckinghamshire Landscape" is a truly decorative piece; E. Handley-Read's "Santa Maria della Salute" is a really good architectural study to the making of which pains as well as brains have gone; and C. D. Ward has taken pains, too, over "St. David's Cathedral." Croft Mitchell, Malcolm Arbuthnot, and A. J. Billinghurst are other members of this small and charming group.

The Redfern Gallery.

Another delightful half-century of drawings and pictures numbers several that are architectural, including "Venetian Roofs," by Margaret Leadbitter; "Flour Mills, Battersea," by Norman James; and an accomplished "View of Winchester," by that admirable water-colourist, the late A. W. Rich. There is a little set of half a dozen studies—largely building studies by Sybil Blunt, which are as charming as they are exceptional. Their subjects have been found at Sarlat, "On the Dordogne," "On the Lot," and they are delightfully handled. A decorative "Spring Flowers" is in Beatrice Bland's good form, and other pieces are contributed by Ursula Tyrwhitt and Ethel G. Radcliffe, and fruit by N. L. M. Cundell and Siné Mackinnon, all of them nice things to hang in a simple and unostentatious room. Other interesting exhibits are by Allan Walton, E. M. Garner, A. Gwynne Jones, W. Lee-Hankey, John Souter (an unusual study of a "Woman with an Asp"), Rudolph Ihlee, and E. Q. Henriques. KINETON PARKES.

Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

After three days careful consideration, Mr. Wheatley's Housing (Financial Provisions) Bill passed through the Committee stage. Many alterations were made in the measure, and more were foreshadowed in the Report stage.

and more were foreshadowed in the Report stage. During the proceedings Mr. Wheatley made a statement with regard to the supply of men and materials. He agreed that there was not, at present, an adequate supply of men and material to ensure the desired number of houses. With regard to the provision of apprentices, he was told that in ordinary practice the apprentice bricklayer learned very little during his first twelve months of service. He intended to take steps immediately the Bill went through to make the apprentice bricklayer a more effective bricklayer then he usually was by the ordinary process of training. He intended to make an appeal for the co-operation of the education authorities in this respect. They ought to have the very best class of training for their approximation and that there is a provide the second sec for their apprentices, and that training should be given in a manner which would enable them to get an output from the apprentices in the shortest possible time. In some schemes in the country already the employer had granted facilities for apprentices to attend training centres during two half-days a week. That had had very satisfactory results, and he intended to introduce a scheme, as far as possible, to make that general. Such training would be given largely in the local technical schools, but largely, he hoped, without much expenditure, on the actual iob where the carries of highle duble duble technical the actual job, where the services of highly-skilled teachers were on the spot where the apprentice went to work, and where they would train him as rapidly as possible in the craft for submitting that to the National Building Committee, or to those who were likely to deal with it, but he had consulted the men's leaders, and they had assured him that they would cheerfully co-operate with the Ministry in any such scheme. He had no doubt, also, that the employers would grant the necessary facilities for carrying on work of that kind, and that the practical work could be supplemented, either in the local technical schools or by evening classes. While he could not speak without an opportunity of consultation, he was very hopeful that it might be possible that the apprentices who had received this special instruction would be passed, by a test, more rapidly into the industry than they would be if they had not had this practical assistance. On the following day he was to inspect a system of building houses largely of steel and timber, which had been invented by an eminent business man, who had a great reputation in the business world. In the past few days he had had submitted to him by one of the bestknown business men in the country a new material for housebuilding, which he claimed would give more substantial and more beautiful houses in a tithe of the time now occupied in building, which would give them more cheaply, and without the services of bricklayers or plasterers. He had no technical or scientific knowledge to enable him to pass judgment on the value of the material, but it seemed quite promising. If it succeeded, the building industry would still require to recruit its *personnel*, but, instead of taking in bricklayers, plasterers, and carpenters, men would be engaged to manufacture the new building material.

Replying to a question by Major Moulton, Mr. Greenwood, Parliamentary Secretary to the Ministry of Health, said that the Minister was aware that the Salisbury City Council, under a special direct labour scheme for training ex-Service men, built twenty houses of concrete. The cost of these houses was approximately $\pounds792$ each, and an estimate of the labour showed a saving of $\pounds75$ a house over the labour costs if the houses had been built at contract prices. The total difference in cost as compared with brick houses built by contract during the same period was substantial. The houses were built of concrete blocks or slabs made on the site, and a large proportion of labour by trainees unskilled in the building trades was employed. The conditions in this case were somewhat special.

[^]Mr. Greenwood informed Mr. Masterman that the Minister of Health thought that the only practical way of securing the necessary augmentation of building labour was by a scheme of apprenticeship on the lines recommended by the National House Building Committee.

Mr. Greenwood informed Lt.-Commander Fletcher that under normal conditions, with the same standard of fittings and completion, very little saving was found to be effected by the adoption of wooden forms of construction. In a recent case a local authority considering the use of wooden buildings found that the cost of the wooden houses came out at f_{460} , as compared with f_{385} for houses similar in accommodation being built in brick. The time taken to erect either brick or timber houses varied considerably; in building the timber house three weeks to a month might, on the average, be saved in the erection of the shell, but ordinarily there would be no saving in time on the remainder of the work which would be much the same. The life of a brick house was commonly held to warrant a loan period of sixty years. As to the timber houses, although certain timber houses had a long life, the general experience was that the effective life could not on average be put higher than forty years, and it was frequently much shorter.

The Society of Architects' Amalgamation Meeting

An extraordinary general meeting of the Society of Architects was held last week at King George's Hall, Caroline Street, Tottenham Court Road, W.C. A resolution was passed which unanimously approved, ratified, and confirmed the provisional agreement of May 29, 1924, for amalgamation between the Society and the Royal Institute of British Architects. The meeting further directed the council of the Society to carry the agreement into effect, either with or without modification. The resolution will be submitted for confirmation as a special resolution to a second extraordinary general meeting, to be held on August 8 at the office of the Society, 28 Bedford Square, W.C.

Mr. E. J. Partridge, president of the Society, stated that he had received 537 votes by proxy, of which 521 were in favour of the resolution.

Mr. Taylor, vice-president, in moving the resolution, said that amalgamation was the quickest, most certain, in fact the only method of obtaining registration, for which the Society had worked as pioneers.

Mr. Meade, seconding, said that the whole matter had been conducted with absolute fairness and consideration for their profession as a whole. As a profession, they had sunk rather low in status. They did not stand in the same position as medical men and lawyers. This would be a step towards improving their professional status and their position with the public.

A Recent Acquisition of the Victoria and Albert Museum

There has now been placed on exhibition a typical shopfront from No. 32 Petty France, Westminster, a locality which is familiar for having been for eight years the dwellingplace of Milton. This was handed over to the Museum by the War Office at the time of the recent demolition of houses in this street. It is of pinewood, and the bow window is supported on iron brackets and surmounted with a cornice, enriched with finely modelled egg-and-tongue and leaf ornament. The period to which it belongs is that of the second half of the eighteenth century, and it represents a class of domestic architecture which is now fast disappearing.

Obituary

Mr. A. Y. Nutt.

Mr. Alfred Young Nutt, M.V.O., who was resident architect at Windsor Castle for many years, died suddenly at his house at Slough last week.

Mr. Nutt was born, one of a family of fifteen, in the rectory of Borrough-on-the-Hill, Leicestershire, in 1847. In 1867 he was appointed by Lord John Manners (who was then First Commissioner of Works, draughtsman to the Office of Works at Windsor Castle; he was next appointed Chapter surveyor, and some years later resident architect at the Castle. He was also architect in charge of the Royal mausoleums. Mr. Nutt carried out

many notable improvements and alterations at Windsor. The annexe to Westminster Abbey at the coronation of King George and Queen Mary, as well as King Edward and Queen Alexandra, were designed by him and erected under his superintendence. On another occasion he was asked to make a temporary flight of steps leading from the East Terrace at Windsor Castle. This was done in plaster, and was so entirely in harmony with the masonry surroundings that it was difficult to distinguish the difference, and at the express wish of King Edward VII the steps were made permanent. The laying down of the turf in the Grand Quadrangle, the extensive alterations in the East Terrace gardens at Windsor Castle, the improvements in the Round Tower moat gardens, and the instalment of the electric light throughout the castle are some of the important works which have been under the direction of the King's architect. In addition to this, Mr. Nutt superintended the work at St. George's and Albert Memorial Chapels, and the Royal vaults underneath. When the entrance door of the latter is opened a number of electric lights are switched on which light up the interior of the huge vaults. He retired from the Office of Works in 1912.

Mr. Nutt was also an artist, and executed many illuminated addresses. He was well known to all the members of the Royal Family, and his knowledge of Windsor Castle from top to bottom, and down to its foundations, was probably unrivalled. Mr. Nutt and his wife (*née* Mary George) celebrated their golden wedding on June 23, 1923. There are three daughters of the marriage.

Correspondence

The Double Staircase

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—It must be well over fifty years ago that I designed a double staircase for an elementary school (St. John Evangelist, Red Lion Square), which is still in existence. The site was a very confined one, and the plan adopted was the only one suited to the circumstances. But it was not "originated by a former architect to the

But it was not "originated by a former architect to the London School Board," for the very good reason that that body was not yet in existence, and therefore had no architect.

KEITH D. YOUNG.

Little Things that Matter: Ventilation

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—"Little Things that Matter," to some people are big things. I venture to think that the Creator knows no littleness, and creates exquisite beauty in microscopic things. To me the question of ventilation is very large indeed, and I venture to write a few lines recording the experience of the forty years in which I have tried to practise architecture.

I have never known the following method to fail.

Assuming that true ventilation is the slow movement of air which passes through a building, a 9 in. by 9 in. air flue running up by the side of the smoke flue, fitted at the lower end with a silk flap inlet ventilator about 9 in. by 6 in., six inches below the ceiling, and having a hole into the air flue in the roof about 18 in. by 9 in., which prevents the suction caused by wind from making an irritating flapping noise with the silk.

Even when windows are built airtight with iron casements in stone mullions and jambs, heads and sills, air will find its way into the room. A 2-in. air pipe to feed the fire is a good thing which will prevent the fire sucking air from under the doors unduly. I do not find it necessary when this air flue is provided to have any special means of letting the fresh air in. And by this means no draughts are created.

