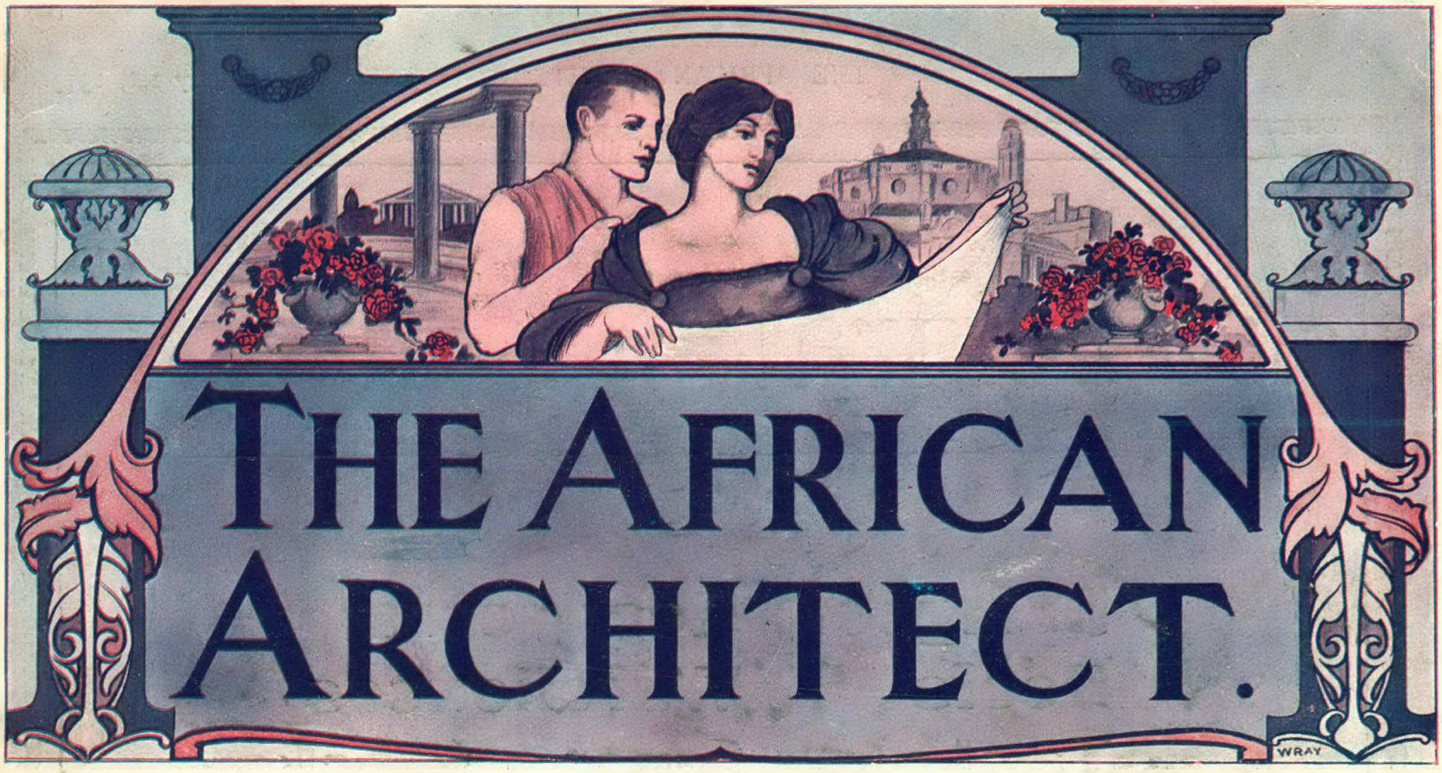
Registered at the G.P.O. as a Newspaper.



VOL. III. No. 2.] JULY 1st, 1913. [10/6 PER ANNUM, POST FREE.

"The African Architect" Advertisers.

The number indicates the page in this issue on which the Advertisement will be found; where a (——) dash appears it denotes that Advertisement does not appear in this issue.

The African Architect

TUESDAY,
JULY 1st, 1913.

VOLUME III. No. 2

[*Photo by Leon Levson.*

THE FIRST ORTHODOX GREEK CHURCH (ST. CONSTANTINE).

Built by the Hellenic Community of Johannesburg, which numbers about 2,000. Situated at the corner of Wolmarans and Nugget Streets. Cost about £3,500, but completed scheme will amount to over £4,000. The dome is shown in course of construction, and asphalted by Messrs. JENKINS & CO.

Architect, MR. H. KALLENBACH. Builders, Messrs. W. J. ADAMS & CO.

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Institute of South African Architects.

Association of Transvaal Architects.

(INCORPORATED UNDER THE ARCHITECTS' PRIVATE ACT, 1909).

THE COUNCIL, 1913:

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Secretary: C. ALDER, LIC. R.I.B.A., Box 5606, Johannesburg.

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Vice-President: S. G. HUDSON, F.R.I.B.A.

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Vice-President: ARTHUR H. REID, F.R.I.B.A.

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President: M. J. HARRIS, M.S.A.

Hon. Secretary: D IVOR LEWIS, M.S.A. **Hon. Treasurer:** G. W. NICOLAY, M.S.A.

Committee: S. C. DOWSETT, M.S.A. J. F. BEARDWOOD, M.S.A. E. H. WAUGH, A.R.I.B.A. C. H. STOTT. (the two latter are *ex-officio*)

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Vice-President: E. WHITE.

Hon. Secretary and Treasurer: J. W. COWLING, F.S.I.

Council: H. A. ADAMS. J. D. HICKMAN. A. STRATTON. D. A MCCUBBIN. W. E. PUNTIS. W. PRIESTLEY

The
African Architect
THE JOURNAL OF THE ASSOCIATION OF TRANSVAAL ARCHITECTS

VOL. III. No. 2.] JULY 1st, 1913. [10/6 PER ANNUM POST FREE.

EDITORIAL COMMENTS

Professional Status.

In the course of a paper read recently by Mr. Ransome, the famous engineer, before the Society of Engineers, he expresses the opinion that his profession would be better esteemed if it were so constituted that unqualified men could be excluded from its ranks. There is much in his paper that architects in South Africa will read with interest and sympathy.

Action in South Africa.

During the last month we have rightly seen action taken to enforce the statute for the registration of architects in South Africa. This must always tend to improve the status of the profession. The new Registration Act which is being promulgated will make it impossible for unqualified men to denote or advertise themselves as architects. We are of opinion that the tests that architects are compelled to submit to are not too severe, and the Association is only exercising its legal and legitimate right when it takes the action it has recently done. In view of that circumstance we fail absolutely to grasp why anyone competent to pass the test laid down should deliberately ignore this Statute. If the Registration Act is to count at all, then it must be strictly enforced and adhered to.

Obscurity in Public.

Further, in pursuance of the subject of architects' professional status, there are quite a number of our South African architects who have done brilliant work but have only had the reward of obscurity. Why? The architect is reticent and exclusive. But there is a more definite reason: the architect has reason to protest against the lack of appreciation on the part of the public, and if he protests it is considered hardly consonant with his dignity. When the Mayor of a town and the distinguished stranger lay the foundation-stones of a notable building, their speeches are duly reported in the newspapers, but the name of the architect is seldom mentioned, and his professional dignity forbids his representing himself to the reporter as the man responsible for the design. There can be no reason for this restriction, except it is because of a mediaeval tradition curtailing the freedom of the architect, and handed down to these enlightened times.

Registration Act.

We noticed that while in South Africa architects are promoting a Registration Act, in other parts of the world there is the same course being followed. The same principle is involved, which is that there is no sinister economic aim, but the idea is merely concerned in raising the prestige of the profession by insistence upon a high standard of individual attainment thereon. The Act deprives unqualified persons of the right to call themselves "architects." This is where the Association has done right in enforcing the law where irresponsible people have defied the law and dubbed themselves under the title to which they were not qualified as "architect."

Visit of Royalty.

Reports from Home cables give it that the Union Government Building at Meintjes Kop will be opened by Royalty. It is now stated that the Prince of Wales, who will be accompanied by Prince Arthur of Connaught, will represent the British nation and British Royalty. Nothing could be more signally appropriate, nor add more lustre to South Africa, which is justly deemed one of the brightest jewels in the crown of the British Empire. What has architecture not done for the advancement of this great sub-continent and British portion of Greater Britain? During the last thirty years the old-time student of architecture can reflect on mud huts, thereafter modest brick houses and offices, and thereafter ! ! ! grand palatial buildings—the Corner House, Standard Bank, Consolidated Buildings, National Mutual, New Law Courts, S.A.R. Offices, Norman Anstey's, Carlton Hotel, Mosenthal's Buildings, Union

Club, Y.M.C.A. Buildings, corner of Joubert and Bree Street, the Newtown Market, Trust Buildings, and Chudleigh's. And the building is still going on notwithstanding the opinion of pessimists that things are waning in the building trade.

Statistics.

Architects are busy at the present moment, and labour statistics prove the truth. For instance, the "Government Gazette" shows that eight Municipalities in the Transvaal Province approved plans having an estimated value of £174,159, as against £124,218 for the previous month, showing an increase of £49,941. Twelve Municipalities in the Cape Province approved plans having an estimated value of £37,974, and the Durban Municipality passed plans having an estimated value of £34,435.

Society of Architects' Examination.

We have pleasure in noting that an examination to qualify for membership in the Society of Architects will be held on the 23rd, 24th, and 25th of this month, in Johannesburg, and at "other convenient centres in South Africa." It should be pointed out that all applications to sit for the examination must be accompanied by a remittance of £4 4s., and must be received by the Hon. Secretary, Mr. Ivor Lewis, not later than noon on July 9th; also by Mr. C. H. Stott, Maritzburg.

Funerals Organised by Architects.

We hope we are a long way off this sort of thing in South Africa. A Home contemporary says:—The following literary curiosity has been sent to us, and we think it in every way worthy of a prominent place in our columns, and herewith express our thanks to the sender, Mr. MacArthur Butler, Secretary of the Society of Architects. We omit the name and address of the firm:—

ARCHITECTS and CONTRACTORS,
Plans and Specifications prepared and Land Surveying carried out on Moderate Terms.

Property Valued, Carefully Managed and Developed.
Rents Collected and Repairs promptly executed.
Concrete Flags and Staffordshire Fire Bricks on Sale.
Funerals completely furnished and personally superintended. Vaults and Brick Graves built on the shortest notice.
Office:

A funeral organised by an architect should have special merits in the eyes of many members of the profession!

Johannesburg Valuation.

The new valuation of Johannesburg amounts to £32,919,082, almost equally proportioned between land and buildings. The amount on the provisional roll was reduced by the Court by £684,549. The new valuation is an increase of £2,250,000 on the previous figures. The news is reassuring from the architect and builders' point of view.

Protective Paints.

Mr. Henry Williams, U.S.N., in the American "Engineering Magazine" for May, has a very pessimistic paper on protective paints for structural steel. He says the question of the proper preservative paint to use for structural steel under each of the different conditions to which it is subjected has been ignored generally by architects and engineers. "Few of them dare to commit themselves to a statement of the possible future consequences that may follow the present neglect of this important question. As a rule, they have little or no knowledge of the fundamental properties of the paints ordinarily specified and used for protecting steel from corrosion. Indeed, the present knowledge of the art is such that few persons, if any, can speak with authority as to what results may be expected from the various materials under all conditions met with."

ANSWERS TO ENQUIRIES

So many enquiries are made personally at this office concerning many matters connected with the profession, that we now find it expedient and only possible to answer these through the medium of this journal. In future, therefore, members are requested to send their enquiries direct to the Editor of "The African Architect," P.O. Box 4651, Johannesburg.

"PORTICO."—I should use some amount of tact in advising your brother to visit this Colony. There is at present a scarcity of good architectural assistants, but little room for improvers at anything over £8 or £10 a month.

"M.J.E."—Thanks; will insert in next issue.

"DISGUSTED."—Yes, and so would we be, were we to insert such a sweet little libel. Your best procedure is to place your case before the Association of Transvaal Architects.

"M."—The lowest tender was £23,478, but this was subsequently reduced to £19,350.

"AMBITION."—Thanks; but no earthly use to readers of this journal. Send stamps for return.

"STUDENT."—Sanitation classes are held at the School of Mines and Technology every Tuesday from 7.30 to 9.30 p.m.

"J. de V."—The title, "Architectural Draughtsman," is not permitted, under the Architects Act of 1909, to be used in the Transvaal, unless you are a registered architect. We understand that the registered body have taken legal advice on this point and acted on it.

"CONSTANT READER."—No, my boy, we are not out to stir up strife between Architects and Quantity Surveyors; not even for a "nom de plume" like yours.

"CASEMENTS."—Try any of the local hardware merchants.

"F.D.M."—A poem on Architects and Builders? No thanks, try the Veldsingers Club, c/o Grand National Hotel, and don't blame us for the consequences.

The African Architect

ORGAN OF THE ASSOCIATION OF TRANSVAAL ARCHITECTS.

JULY 1ST, 1913.

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SPECIAL ARTICLES on general subjects of interest to the architectural profession, and photographs, are cordially invited from our readers. Where payment is expected this should be distinctly stated. Special care will be taken of MS., but the Editor will in no case guarantee its return.

LETTERS TO THE EDITOR.—The columns of "The African Architect" are open at all times for expression of the opinions of our readers, but the Editor disclaims responsibility for the views of correspondents. All letters must be signed with the name of the correspondent, not necessarily for publication, but in evidence of *bona fide*, and addressed "EDITOR, 'The African Architect,' Box 4651, Johannesburg."

BUSINESS ANNOUNCEMENTS.—All communications on business matters should be addressed to "THE BUSINESS MANAGER, 'The African Architect,' Rooms 17 and 18, Provident Buildings, Fox Street, Johannesburg."

"The African Architect" is on sale at Chicken's News Agency, Pritchard Street, Johannesburg.

REGISTRATION OF ARCHITECTS

THE subject of the greatest import to architects in South Africa at the present moment is that of registration. The Bill has finally, we understand, been drafted, and will come forward in due course, while, in the meantime, under the old Act, unqualified men will not be allowed to practice, but be prosecuted. The new proposed Act, we understand, has been finally drafted, and it is one that should commend itself to our legislators. It is drastic, no doubt, but its formula is imperative—maintaining, as it must, the high status of the most ancient profession in the world. We hear that the measure is receiving the general approval of the profession. We may be sure, also, that it will give the architects the supreme power to appoint examiners and issue certificates, which even the present law does, but it will, also, allow them to extend their powers in South Africa in the way of empowering them to use their funds more freely in the interests of the profession. We note that in New York State (where there has been much architectural revival), after many years of agitation, a Bill for Registration of Architects has been decided upon. It is stated that the proposed Board of Examiners will consist of five architects who have been in active practice in New York for a period of at least ten years. The qualifications which a candidate must possess in order to be in a position to secure a certificate entitling him to practice architecture are indicated as follows:— A diploma issued by any recognised architectural school, together with proof of three years' practical experience, after graduation, in the office of a reputable architect, will be considered sufficient evidence of fitness; or the Board at its discretion may accept a certificate of registration as an architect in another State where standards of requirements are equal to those prescribed in the proposed law. Heavy penalties are imposed for violation of the provisions of the statute by persons practising as architects without a certificate. It will thus be seen that South Africa is not far back in its demands for legal rights as far as upholding the profession of architects is concerned.

SOCIETY OF ARCHITECTS.

Founded 1884. **29, Bedford Sq., London, W.C.** **Incorporated 1893.**

SOUTH AFRICAN BRANCH.

The above Society will hold an examination to qualify for Membership provided a sufficient number of candidates present themselves, on the 23rd, 24th, and 25th July, 1913, in Johannesburg, and at other convenient centres in South Africa. All applications to sit for examination must be accompanied by a remittance of £4 4s., and must be received by the Hon. Secretary not later than noon on Wednesday, July 9th, 1913.

Forms of Application and Syllabus may be obtained from the undersigned, and also from C. H. Stott, Esq., P.O. Box 7, Maritzburg.

The Society reserves the right to refuse any Application for Examination, in which case any entrance fee paid will be refunded.

D. IVOR LEWIS,
Hon. Secretary (South African Branch).
P.O. Box 667, Johannesburg.

Mr. J. S. Donaldson has been elected a member of the Society of Architects. The new member has an extensive practice in Johannesburg, where during the last twenty years he has some fine architectural work to his credit.

MR. BAKER'S BANQUET

THE GLORY OF AGRA; THE TAJ MAHAL

Mr. Herbert Baker, F.R.I.B.A., in the Carlton Hotel, on Friday, the 13th June, entertained members of the Executive Councils of the Transvaal Institute of Architects and the National Federation of Building Trade Employers. The following were amongst the guests.

Mr. Herbert Baker, F.R.I.B.A. (in the chair); Messrs. W. H. Stucke, F.R.I.B.A., President, Association of Transvaal Architects; P. E. Treeby, President, Transvaal Institute of Architects; M. J. Harris, President, Society of Architects, S.A. Branch; Walter Reid, F.R.I.B.A.; H. G. Neale, R. Howden, D. M. Sinclair, E. H. Waugh, Frank Emely, D. Ivor Lewis, Hon. Secretary, Society of Architects; Messrs. Porter, Quail, Kerr, and Black; Mr. Cecil Alder, Registrar, Association of Transvaal Architects. Builders: Messrs. Thomas Clark, James Prentice, J. J. Kirkness, Jas. Thompson, and T. Douglas; and Mr. Jas. T. Brown, General Secretary, National Federation of Building Trade Employers in South Africa.

After dinner, Mr. Baker said that he proposed that the evening should be entirely informal. He also expressed his thanks for the kind cables of congratulation which had reached him during his visit to India, from the architects of South Africa, and from the Master Builders' Federation. He could assure them that he felt very proud of these.

Mr. Baker thereafter gave details regarding the work which Mr. Lutyens and himself had been called to carry out in the erection of the new Delhi capital city of India.

Complimentary speeches were delivered by various gentlemen present, Mr. Thomas Clark expressing the sentiments of the builders.

The proceedings throughout were most pleasant.

The Taj Mahal

At the above dinner Mr. Clark, in alluding to their host's abilities as an architect, mentioned that, perhaps, in future generations some part of the new capital city of Delhi would be looked upon by the people of India with the same pride and veneration as the world famous mausoleum of Taj Mahal, whose richness, refinement and magnificent design has been discussed by eminent writers of all countries. A brief description of the Taj Mahal is as follows:—

The glory of Agra, the most splendidly poetic building in the world, is the Taj Mahal, the mausoleum built (A.D. 1632) by the Emperor Shah Jahan for the remains of his favourite wife, Mumtaz Mahal, in which he himself also lies buried. The building is of white marble throughout, crowned with a great white dome in the centre, and with a smaller dome at each of its four corners. From the marble terrace which surrounds it rise four tall minarets of the same material, one at each corner. The Taj has been modelled and painted more frequently than any other building in the world, and the word pictures of it are numberless. But it can only be described as a dream in marble. It amply justifies the saying that the Moguls designed like Titans and finished like jewellers. In regard to colour and design the Taj ranks first in the world for purely decorative workmanship; while the perfect symmetry of its exterior can never be forgotten, nor the aerial grace of its domes, rising like marble bubbles into the azure sky.

In his "History of Architecture," Fergusson says of it:—

"This building is an early example of that system of inlaying with precious stones which became the great characteristic of the style of the Moghals after the death of Akbar. All the spandrils of the Taj, all the angels and more important architectural details, are brightened by being inlaid with precious stones, such as agates, bloodstones, jaspers and the like. These are combined in wreaths, scrolls and frets, exquisite in design as they are beautiful in colour, and relieved by the pure white marble in which they are inlaid, they form the most beautiful and precious style of ornament ever adopted in architecture. It is lavishly bestowed on the tombs themselves and the screens which surround them, but more sparingly introduced on the mosque that forms one wing of the Taj, and on the foundations and surrounding buildings. The judgment, indeed, with which this style of ornament is apportioned to the various parts, is almost as remarkable as the ornament itself, and conveys a high idea of the taste and skill of the architects of this age."

Of the Taj as a whole, Lord Roberts says in his book, "Forty-one Years in India":—"Neither words nor pencil could give to the most imaginative reader

the slightest idea of the all-satisfying beauty and purity of this glorious conception. To those who have not already seen it I would say, 'Go to India. The Taj alone is well worth the journey.'"

The Taj was designed by Ustad Isa, variously described as a Byzantine Turk and a native of Shiraz in Persia. The pietra dura belongs to the Persian school; and the common belief that it was designed by Austin de Bordeaux, a French architect in the service of Shah Jahan, is probably incorrect.

Agra was formerly the capital of the North-West Provinces, but after the Mutiny the seat of government was removed to Allahabad. Situated 841 miles from Calcutta, it is now an important railway centre, whence two main lines diverge southwards towards Bombay. In 1901 the population was 188,022, showing an increase of 12 per cent. during the decade. The city contains cotton mills, factories for ginning and pressing cotton, a tannery and boot factory and flour mill. There are also two missionary colleges.

BUILDING MATERIAL OF THE FUTURE

Mr. J. G. Gibson, who specialises in concrete blocks, is anticipating the time when concrete will be largely employed in place of brick in building. The "Gibson" Rock Face Block, being formed in a mould taken from an actual cut stone, is a perfect counterfeit in appearance, and can be produced in any desired natural colour. The blocks can be made to any design, are non-porous, and the fact that the famous "Pudlo"—the most effective agent known for rendering cement thoroughly waterproof—is used in their manufacture, is a guarantee that they cannot deteriorate and are proof against damp for all time. Tested at the Government Laboratory, they bore a pressure of 83 tons. In size they vary from 1 foot to 12 feet by any required depth, and corner blocks can be supplied to any design for brick buildings. The price is about 10s. per superficial yard.

AN ENTERPRISING INDUSTRY

The M. and V. Paint Manufacturers, Doornfontein, whose well-known products are rapidly gaining the favour of painting contractors, etc., are engaged in extending their plant to cope with the increasing demand. Metallic, heat-resisting paint they claim to be the best and cheapest paint on the market for structural ironwork, roofs, bridges, etc., as varying temperatures, heat, moisture, sea air do not affect it. The Carbolineum they manufacture as a wood preservative and insecticide, has proved its efficiency by the number of repeat orders received. M. and V. carbo floor stains, in oak, walnut and mahogany, have the advantage over other stains in that they not only successfully imitate the respective woods, but also preserve it and keep it free from vermin. M. and V. dry red oxide for granolithic work is speedily making a reputation, having a good staining power and a splendid colour. M. and V. damp-proof glaze is guaranteed as a cure for damp walls, giving a thoroughly waterproof finish. The firm attribute their success to thoroughness in all their work.

UNQUALIFIED ARCHITECTS

THE LAW MUST BE OBEYED

CASE IN COURT

The Association of Transvaal Architects instituted criminal proceedings, on June 10th, against a man, J. de Voss, who, although not registered as such, has been describing himself as an architect. J. de Voss appeared before Mr. Graham Cross, in "C" Court yesterday morning, charged with contravening Section 1 of Act 39 of 1909 (private) in that on or about May 12, at Newtown, he wrongfully and unlawfully put a description or advertisement on his place of business, holding himself out to be an architect, and that he painted upon his window the words, "J. de Voss, architect, charges moderate." Accused, who was defended by Mr. Holland, pleaded guilty.

Mr. Robert Rushton prosecuted.

The Registrar's Evidence

Cecil Alder, the Registrar of the Association of Transvaal Architects, said he knew the accused. His place of business was situated at the corner of Malherbe and Bree Streets, Newtown. On May 12, witness proceeded to accused's place of business and saw written on the window the words "J. de Voss, architect, charges moderate." Witness stated that he had spoken to the accused several times, but he had refused to withdraw the notice. Accused admitted he was not a qualified architect. Witness handed in a municipal form upon which the accused had signed himself as an architect.

By Mr. Holland: Accused had written to witness asking for registration, and witness replied that he could not be registered. He had not the required qualification for registration.

Giving evidence on his own behalf, accused stated that he had taken down the notice complained about. He had written several times asking for registration, but had received no answer. He was not aware he was committing a crime. He had practised in the Cape as an architect for some time.

A Poor Game

In answer to Mr. Robert Rushton, accused stated he had made very little money out of his business. Only about £15 to £18 per month. He was a married man with children. He had carried on business since September last. Mr. Alder had spoken to him some time ago.

In giving judgment, Mr. Cross said, in addressing the accused: "You could have saved yourself a lot of trouble if you had only treated Mr. Alder with a little more consideration, and when he spoke to you about the matter you should have consulted your solicitor. The penalty in a case of this description is a very severe one, but I will not impose the full penalty. If, however, you persist in your attitude you will be severely dealt with. You must pay £2 fine or seven days' imprisonment with hard labour.

ARCHITECT'S FEES IN DISPUTE

EQUITY OF PERCENTAGE TARIFFS

A case was begun before Mr. Justice Ward in the Local Division of the Supreme Court, on 18th June, wherein J. J. H. Lubke, an architect, practising at Durban, sued Otto Kegel, the keeper of a boarding house on the Geduld Proprietary Mines, at Springs, for £731 16s. 4d., architect's fees in connection with the proposed erection of an hotel at Oceana Beach, Durban, these fees including a 3½ percentage on the lowest tender received, namely, £22,189 12s.

Mr. Feetham appeared for the plaintiff, instructed by Messrs. Bell and Nixon. Mr. Stratford, K.C., and with him Mr. Alexander, instructed by Messrs. Adam and B. Alexander, appeared for the defendant.

According to the declaration of the plaintiff, defendant on October 24th, 1911, consulted the plaintiff about the proposed erection of an hotel on the Ocean Beach, Durban, on a site purchased by the defendant from the Durban Corporation; and the plaintiff advised the defendant thereon. On or about October 25, 1911, the defendant instructed the plaintiff to prepare complete plans and specifications for a first-class hotel, to be known as the Strand Hotel, and to be erected on the site. The plaintiff duly prepared the plans and specifications in accordance with the defendant's instructions, and those were submitted to and approved by the defendant. On January 8, 1912, defendant further instructed the plaintiff to call for tenders for the erection of an hotel in accordance with the plans and specifications, and the plaintiff called for and obtained tenders accordingly. The lowest of those tenders amounted to £22,189 12s. The defendant about October, 1912, and after having approved the plans, further instructed the plaintiff to make certain alterations in them, and such alterations were duly made by the plaintiff in accordance with the defendant's instructions and were approved by the defendant; and a tender for erecting an hotel in accordance with the altered plans and specifications was obtained by the plaintiff in accordance with the defendant's instructions. The terms upon which the defendant employed the plaintiff to render professional services were that the defendant should pay to the plaintiff the usual fees for such services. The usual and customary fees for the professional services rendered by the plaintiff to the defendant amounted to the sum of £731 16s. 4d., or in the alternative, the plaintiff was entitled to the sum of £731 16s. 4d., as reasonable remuneration for professional services. Payment of this sum, interest and costs were asked of the Court.

The defendant's plea set out that on October 24, 1911, he discussed with the plaintiff the advisability of erecting a first-class hotel at a cost of £20,000 on a site at Ocean Beach, Durban, which site he purchased from the Durban Corporation for £4,000, and paid to the Corporation the sum of £1,600 on account of the purchase price, leaving a balance of £2,400 still due. Defendant then informed the plaintiff that he (defendant) had not the necessary means to erect the hotel, and plaintiff advised him to raise it on mortgage. On October 25, 1911, it was mutually agreed between the plaintiff and the defendant that the plaintiff should prepare all necessary plans and specifications for the proposed building, and when they were complete the defendant should endeavour to raise the money required for the proposed building, and, if successful, then the erection of the building should be proceeded with, and the plaintiff should be appointed the architect, and receive a remuneration on the ordinary scale of architect's fees; but should the defendant fail to raise the necessary money, and the building of the proposed hotel not be proceeded with, then the plaintiff agreed to render all services in preparing the plans and specifications, and receiving the necessary tenders free; and to make no charge for them against the defendant. It was admitted that the tenders were called for, but it was denied that any instructions had been given to call for them. The lowest tender received was for £22,189 12s. The defendant thereupon asked that the application be dismissed by the Court.

Various architects, namely Messrs. Lubke, Moffat, Kallenbach, and Cooke, went into the box to give evidence as to the cost of preparing the plans produced in Court, and to the percentage charged, the tenor of their evidence being that an equitable charge was on a percentage basis irrespective of standing or special circumstances.

Mr. Feetham said that there were only two questions to be studied, one was as to what was the ordinary course of remuneration to which the plaintiff

was entitled for the work done, and the other as to whether any deduction was to be made from that rate of remuneration owing to the fact that he had certain sketches placed at his disposal. There was no dispute that the work was done. It was extremely difficult to assess charges on the basis of time occupied or of expenditure. A professional man did not reckon his hours.

Mr. Stratford said that the case of Swan and Nourse laid it down definitely that the architect's scale of charges was not necessarily to be availed of by the Court. The real principle should be to remunerate adequately, not by fixed rule. Mr. Stratford mentioned that a tender of £250 had already been made by his side and had not been accepted. Three guineas per day, said Mr. Stratford, was a good guide as to what remuneration should be given, and that worked out, with extras, at £240. They had tendered £250. His (plaintiff's) idea was that the whole thing would go through, and that he (plaintiff) would be the architect.

The Judge reserved judgment.

A LUCKY QUARRY

The substitution by the road authorities of granite for soft local stone has converted the parish quarry of Lakeland, Embleton, in Cumberland, which had hitherto been regarded as of little or no value, into a property valued at £50,000.

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MR. T. E. L. JAMES, F.R.I.B.A., M.S.A.

Mr T. E. L. James, who died at Balham on May 12, at the age of fifty-five, was the architect of several schools—notably the Rydal Mount School, Colwyn Bay; Queenswood School, Clapham Park; and Manor House School, Clapham Common. He had also done much domestic and business work and some ecclesiastical work. He was elected F.R.I.B.A. in 1893.

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THE KING EDWARD MEMORIAL

A meeting of the advisory committee of the King Edward Memorial Fund was held recently at the Mansion House, Sir Vezy Strong in the chair. The fund was reported to amount to £71,261, exclusive of an anonymous gift of £25,000 promised by a lady in connection with the Shadwell Market site, and £5,000 about to be contributed by the Poulter Trustees. The committee had before them various plans for the laying out of pleasure-grounds in the Shadwell Market area, which has been recently acquired from the Corporation at a cost of £70,000. The estimated expense of laying out varied from £40,000 to £70,000. The Chairman said the eminent firm of engineers of which Sir Alexander was the head had kindly consented to act as honorary engineers to the committee, and Mr. F. Palmer, consulting engineer to the Port of London Authority, had agreed to prepare plans and estimates for the erection of the river-wall to the Shadwell Market site, absorbing as much as possible of the bed of the river as could be granted by the Authority.

IMPORTANT TO ARCHITECTS

BUILDING CONTRACTS

DISQUALIFICATION OF ARBITRATOR

In the current 'Law Reports" will be found a somewhat belated report of the decision of the House of Lords in the case of Hickman v. Roberts, delivered May 9, 1911, which is a case of considerable importance to architects as defining the attitude they must preserve when exercising their quasi-judicial functions under a building contract. The facts may shortly be stated as follows:—Mr. Roberts, a builder, was under contract to erect certain buildings for the appellants, Messrs. Hickman, for a sum of £2,750. The contract contained the usual clauses that the work should be performed to the entire satisfaction of the architect to the employers; that he should have power to make any variation or order extra work; that his decision relating to the goodness or sufficiency of any work, the extent or value of any extra or omitted work was to be conclusive and binding; and payments were to be made in certain percentages as the work proceeded on the certificate of the architect, the balance on completion of the period, the contractor's term of maintenance, viz., three months.

Completed Work

The work was completed on April 2, 1908, and £2,300 had then been paid. The builder claimed a further sum of £554 2s. 5d., and after the expiration of the period of maintenance commenced an action for this sum. After the action was commenced, and in opposition to the summons for judgment exhibited to an affidavit was the final certificate of the architect for a sum of £339 9s. 4d., and leave to defend the action was given as to the difference between the two sums. The appellants contended that the certificate was final and conclusive, but the respondent alleged that there had been collusion between the appellants and the architect. The importance of the decision lies in the fact that the House of Lords held that the architect had not been guilty of "collusion," "turpitude," or "fraud," but yet that the certificate given by him was not conclusive because he had not acted with that independence required of persons in his position acting as arbitrator for both parties. It is impossible here to refer in detail to the evidence upon which the judgments were based. We can only say that from the opinions delivered by the Law Lords it appears that they found that the arbitrator had ceased to act as a free agent, but allowed himself to be under the influence and control of the building owners.

The Breach of Duty

Another point in the case was that it was contended that after the breach of duty on the part of the arbitrator was known to the builder he asked for further certificates and therefore had waived the irregularity. This contention, however, was disposed of by the finding that there was not a full disclosure of the facts to the builder at the time the further certificates were applied for. Both the Court of Appeal and the House of Lords therefore held that

the action was rightly brought, the architect having not exercised his judicial functions as an arbitrator and the certificate not being therefore conclusive, and the question in dispute was referred to the Official Referee.

INVITING TENDERS FOR THE PREPARATION OF BILLS OF QUANTITIES

The following circular, "The Builder" is informed, has recently been issued to the leading public authorities:—"The Council of the Quantity Surveyors' Association has repeatedly had its attention called to the growing and objectionable practice of public authorities advertising for tenders from surveyors for the preparation of bills of quantities. The Association has therefore recently adopted a bye-law under which any member tendering for or undertaking public work below the scale issued by the Association in 1906 will be considered guilty of conduct prejudicially affecting the reputation of the Association. The Council thinks the time has arrived to check a practice so directly opposed to the production of responsible and accurate work, a practice unknown in any other profession, and totally inconsistent with the policy of those authorities who insist upon all workmen being paid the standard rate of wages. The Council is at all times prepared and willing to confer with any public authority and to advise them as to a reasonable fee to be paid for the preparation of bills of quantities, and it hopes this course may be the means of protecting public authorities from the consequences which frequently result from the employment of unqualified men who undertake work at a low rate of remuneration."

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THE ARCHITECTURAL ASSOCIATION

The Architectural Association are, as a rule, to be congratulated on the vigour and determination with which their successive Councils promote enthusiasm and keep alive the interests of the younger members of the profession. Following on the most successful exhibition of French students' drawings, which was opened by M. Cambon on Tuesday, and attended by many distinguished French architects, the annual dinner of the Association was held at the Trocadero Restaurant. In responding to the toast of the R.I.B.A., Mr. Blomfield placed once for all his position with regard to the atelier question clearly and forcibly by stating the interest and friendly feeling which he and his colleagues felt for this and other genuine educational movements. But he also pointed out that behind the French atelier stood the Ecole des Beaux-Arts. His observations on this subject should be carefully read and considered by all interested in architectural education. Reference was made on the occasion to the appointment of Mr. Robert Atkinson as head of the Architectural School in the place of Mr. Maule, whose services to the Architectural Association received the recognition which is the due of one who has devoted time, skill, and labour to a difficult and responsible task.

PROFESSIONAL DEFENCE

A series of important cases recently decided in the law courts, and sundry others now pending, have aroused a keen interest in the architectural profession as to the position of its members in the eyes of the law. What have been clumsily termed "the newer responsibilities of architects" are, in fact, those liabilities which are now becoming annually more serious and more harassing, and which every judgment tends to define more clearly. It is obvious that the wayward comic-opera architect, with long hair and Bohemian morals, is out of date in this stern age of relentless competition, and that his successor must be capable of looking after himself in cross-examination as well as in the atelier. Art, with a big A, may occasionally attract a client, but art alone will not protect his interests if he become entangled in the bewildering meshes of the law.

Combination

Every indication points to a need for some closer form of combination and co-operation among us, until it shall become as difficult unjustly to attack an architect for negligence as to convict a railway employee of neglect of his less complex duties. At the present moment, it may be noted, this ideal is very far from being realised.

The rapid march of events and the growing seriousness of their results leave no time for philosophic reflection, but show us clearly that any steps we can take in the direction of opposing a solid front to slanderous and malicious attacks must be taken immediately and resolutely. With this object in view we propose in the course of the present article to indicate briefly the success which has attended parallel movements in other trades or professions, and to outline the details which we may utilise for the purpose of drawing up a scheme for our own protection.

Much has been written by antiquarians and enthusiasts of the mediaeval guilds—of their devotion to their craft and their altruism—till one is led to believe that the greatest achievements of the Middle Ages in architecture and the minor arts of decoration were no more than the outpourings of faith from the simple hearts of guileless peasants. But all the facts of history prove that these guilds, whether of merchants or craftsmen, were formed to protect the interests of their members, and their wonderful efficiency and success during the thirteenth and fourteenth centuries were due rather to the rigour of their rules than to any underlying spiritual basis. Strict regulations as to apprenticeship limited the members of each craft or trade in each town, and the unqualified practitioner was mercilessly banned. Hours of labour were regulated, and payments were made to a common fund. The processes of manufacture were supervised, and production was artificially controlled. Such were the primary objects of the craft and merchant guilds, which decayed and collapsed owing to changed conditions during the sixteenth and seventeenth centuries.

Guilds and Trade Unions

As associations of master-craftsmen these guilds

approximated much more closely to professional combinations of to-day than do the modern trade unions, which are invariably formed to defend the workman against his employer. At one time, in the fourteenth century, the "journeymen"—e.g., the employees or casual labourers who journeyed from town to town in search of employment from various master craftsmen enrolled in the guilds—attempted to form a guild of their own to oppose the stringent rules of the craft-guild. But they were never really successful, and the experiment did not survive a hundred years.

The trade union is a nineteenth-century growth, and has become in our own day a remarkable phenomenon. Being, as we have said, an association of labour against capital, its objects cannot have any great resemblance to our own, but the methods in which they are obtained are illuminating.

In a statute of 1800 it was enacted "that all persons combining with others to advance their wages or decrease the quantity of their work, or in any way to affect or control those who carry on any manufacture or trade in the conduct or management thereof, might be convicted before one justice of the peace, and might be committed to the common gaol for any time not exceeding three calendar months, or be kept to hard labour in the house of correction for a term of two calendar months."

Trade Unions in Great Britain

At the present time the trade unions of Great Britain number over 2½ million members, and are increasing rapidly. They have between forty and fifty representatives in Parliament, and they control industry and production to an extent never known before, while modern doctrines of Syndicalism—which only the more advanced sections have accepted—open up endless possibilities of international combination.

Quoting an admirable definition—"The principal object of every trade union is to benefit the trade interests of its members." This may be done in various ways—by raising wages and shortening hours, by ensuring a minimum wage, by reducing overtime, by limiting the numbers in the trade through regulating the age and qualifications of apprentices, and "by securing a monopoly of employment for members of the union by a refusal to work with non-unionists."

In its earlier days the trade union movement attached great importance to its philanthropic functions, in which, of course, the objects were very similar to those of the friendly society, and "benefits" were arranged for sickness, accidents, funerals, and unemployment. All these "benefits" are a species of insurance, and have no value in trade disputes. But there is, in addition, a "dispute benefit," which merits our closest attention. It is easy to see that a workman involved in a dispute with an employer has neither the capital nor the standing to oppose him on equal terms in a court of law, even if his case be a reasonably good one. The workman, in fact, cannot afford to "lose his job." But if, by combination among the vast majority of all other workmen of the same trade, he can render it impossible for the employer to find another man to take his place, the circumstances assume a very different aspect. Still stronger is his case if, after paying for many years a trifling subscription to a common fund, he can rely upon his union to back him with legal aid in the law courts and to support him and his family during his period of unemployment.

Their Policy

Here lies the strength of all trade union policy. Even a wealthy employer hesitates to enter upon a dispute with a workman if he knows that he risks the opposition of a powerful corporation with enormous accumulated funds. Naturally trade unionism has its defects, glaring and obvious enough. Not the least of these is the barrier which it frequently places between employer and employed, each arrayed against the other in a hostile camp.

The "new unionism," as it is called—the policy of the newer unions formed within the last twenty years—tends to accentuate this tendency, and assistance of the workman in disputes is its primary concern. The dockers' and gasworkers' unions are examples of such organisations, and Syndicalism is the inspiration of much of their system.

It is interesting to note the various expenditure of the great trade unions at the present day. For the three years 1908-10, out of every £1 spent by the hundred largest unions in this country, 2s. 8d. was spent upon dispute benefits and 6s. 2d. upon unemployed benefit, while 7s. 6d. was spent on sick, funeral, and other friendly benefits, and 3s. 8d. on working expenses, etc. The rates of contribution among the unions vary greatly, being from 7s. to £4 per head; while the accumulated funds for the metal trades are as high as £6 3s. 8½d., for the building trades as low as 18s. 8½d. per head, and for the unskilled labourers' unions even less.

Trade Unions' Weakness

Trade unionism has its greatest strength in large towns and industrial districts, and its weakest in country districts or in small establishments. It is easy for a workman in a factory employing 300 hands to become a trade unionist, but very difficult if he is one of two. After repeated efforts it has never been possible to organise successfully farm labourers throughout the country into one strong union, for circumstances are against it. But a new and noteworthy tendency is the increasing readiness of the men in black coats—the clerks and the musicians—to follow the lead of the artisans and unite for mutual defence. Even waiters have been forced to recognise the inevitable, and have adopted Syndicalist ideas with remarkable results recently, so that it is probable that in a few years only the domestic servants of the most aristocratic houses will be outside the all-embracing doctrines of this great movement. Almost the only class of men in towns whom trade unionism fails to grasp permanently and continuously are the wretchedly-paid casual labourers at the docks, whose very poverty sometimes prevents them paying the small but necessary annual subscription.

The question of "Trade Unionism for Professions" has been very exhaustively and admirably treated in a paper read a short time ago by Mr. A. Burnaby Howes before the Quantity Surveyors' Asso-

ciation. He states the conditions prevailing in the various professions which are more or less closed, by statute or by custom, and brings forward a very cogent argument for closing the profession of quantity surveying. We do not agree with his use of the word "trade unionism" altogether, for, as we have already pointed out, a trade union in the accepted sense nowadays is an association of workmen in any trade against their employers who carry on that trade, rather than a combination of employers and workers in that trade against the world outside. The real trade union in architecture, for instance, would be a union of architects' assistants against their employers with the object of improving the conditions of employment and securing better pay. Such an association does exist, but it labours under a difficulty indicated above, that an isolated assistant in a small office is unhappily placed in the event of a dispute, and that to threaten his employer with a union would cause friction. The average assistant, moreover, regards his period of servitude as temporary only, and hopes in a certain number of years to become independent, with a practice of his own. He thus cares little about his trade union, and his case is analogous to that of a servant girl who will not join any association because of her isolated position, and because she hopes that she may terminate all her miseries by marriage. In both cases this optimism is frequently misplaced, and trade unionism is then the only solution.

The Legal Aspect

Both branches of the legal profession are very close corporations, and, their members being officers of the courts, are indirectly under State control. A solicitor need not be a member of the Incorporated Law Society, but he must pass its various examinations, and he must be articled for from three to five years. He must also pay annually from £6 to £9 for a certificate allowing him to practise, in addition to an entrance fee of £30. On the other hand, the Inns of Court, to one of which a barrister must belong, have no statutory recognition, but form the most strict of professional corporations. In either case the governing body has a right to expel a member for infamous conduct, the power of expulsion in the case of solicitors resting with the Master of the Rolls. A solicitor may not charge fees above the amounts fixed by a certain scale, but nothing except etiquette and custom prevents him charging less, and this is frequently done. A barrister, on the other hand, is not allowed to charge less than a guinea for any work whatever. A solicitor may sue for his fees, a barrister may not. Conversely a barrister is not liable for negligence! A barrister may not practise in various stipulated professions, nor accept a brief on any but his own circuit.

Evading Registration

The various professions connected with medicine —physicians, sugeons, dentists, veterinary surgeons, apothecaries, and pharmacists—are all regulated by Acts of Parliament, and have more or less of a monopoly of their respective branches. A quack doctor can only evade the registration laws by calling himself a "bonesetter" or "herbalist," or a quack veterinary surgeon by similar deception. A man may not call himself a pharmacist without a licence, but he may call his shop a pharmacy! The dental profession is more unfortunate, and is much troubled by unqualified men who find it a simple matter to evade the loosely-drawn provisions of the Dental Acts. The General Medical Council has a remarkable power over the conduct of its members, its authority being almost absolute, for if a member be expelled he has no right of appeal to a court of law. The medical profession is also bound by an elaborate code of etiquette, but to us perhaps it chief interest lies in two associations which are not compulsory but have been organised by doctors and dentists to meet the numerous actions for negligence, slander, libel, etc., so frequently instituted against hard-working and honourable medical men. The Medical Defence Union and the London and Counties Medical Protection Society closely resemble one another in their objects and organisation, and we may regard the latter as typifying both in the following details, which we give as bearing out the need for similar associations in connection with other professions. For an annual subscription of half-a-guinea members can rely on the legal support of the Society in all cases where they are unjustly attacked in connection with their professional work. How often these cases occur will be realised when it is stated that during 1912 more than 10 per cent. of the very large number of members applied for advice or assistance, and how valuable are the efforts of such a Society is shown by the great number of such actions which were never taken into court when its aid was once invoked. Dentists are even more liable to such annoyances than doctors, and a proportionately large number of appeals came from dentists in 1912. The triviality and injustice of many actions is plain to anyone who reads the reports of these societies, and it becomes apparent how much medical men suffer from the idle tongues of gossips. A further and even more remarkable development from these societies is a system of insurance in connection, by which for a payment of 10s. per annum medical men may insure themselves against damages and costs to the extent of £2,000 in any year in any case which the Society fought on their behalf. The only unsatisfactory feature of these excellent unions is that in many cases men do not join them until they actually require their assistance, a fact which has led to a rule refusing assistance to any member until after he has been duly and properly elected.

Having now examined the characteristics of unions and associations among various professions, it only remains to point the application of them to our own case. The Royal Institute of British Architects now include the great majority of reputable members of our profession. Although the movement towards Registration may seem slow to some of our readers, Registration is approaching the region of practical politics, and the younger architects of to-day may see it before they die. The boycott has been actively introduced for members who enter for vetoed competitions, and there is no right of appeal. A scale of fees has been in existence for many years, and is to be revised, though it may be long before the British

public accepts the revised scale. We have no compulsory articles, and, so long as architects continue to come to fame from the bottom of the ladder, it is to be hoped that no such system will be introduced, for thereby the poor man will be ousted from the profession.

The Principle Involved

But what we have not yet got, and what we must have without delay, is some such society as we have just described, which will fight our battles for us in the law courts when a question of principle is involved, and which will make even a wealthy client think twice before instituting an action for negligence or collusion against honourable men performing their professional duties. Whether such an organisation is to be formed within or without the Institute, what its rates of subscription are to be, and how its rules are to be drafted, is immaterial and easily adjusted when once the initial step is taken.

Lastly we ("The Builder") must remember that attention has been rapidly focussed on this matter by recent or pending actions in the law courts, and that, if it lies in the power of the profession to assist in anyway those architects whose hard case has shown the crying need for reform, we owe it to them as martyrs for a cause.

A PLEA FOR ANGLO-SAXON ART AND ARCHITECTURE.

Mr. G. Baldwin Brown, Watson Gordon Professor of Fine Art in the University of Edinburgh, delivered at King's College, London, the first of a course of four lectures on Anglo-Saxon architecture. In the department of history the late Professor Freeman succeeded in breaking down the orthodox creed that English history began with the Norman Conquest. In architecture a similar orthodoxy insisted that English architecture began at the same period, and thus architects practically ignored five centuries of English architectural history. People in general regarded their Anglo-Saxon forefathers as rather a dull, inartistic race, and all the good artistic work of the period had been attributed to a foreign origin. As a fact, there was cogent archæological evidence that work such as the early "sceatt" coins, the "Kentish" jewellery of the seventeenth century, the illuminated "Lindisfarne Gospels" of about A.D. 700, the "Alfred" jewel of the time of that monarch, the "Durham" embroideries of about 910, the Ruthwell and Bewcastle crosses, and other beautiful carved stones—all treasures that would be conspicuous in any collection of the masterpieces of mediæval art—were of native Anglo-Saxon workmanship. Of the Anglo-Saxon churches still existing in England little remained, he said, but the bare fabrics; but these evidenced a monumental simplicity and a high degree of artistic excellence. There had been too great a disposition in the past to depreciate our Anglo-Saxon ancestors by attributing ancient works of art to French or Byzantine workmen. As a matter of fact, the average of the best productions of the Anglo-Saxon workmen was, if anything, above the average merit of those of their competitors in other countries.

MODERN ARCHITECTURE

The paper read by Mr. Thomas Hastings at the Royal Institute of British Architects recently was a terse and forcible expression of the problem of to-day the means whereby we can expect to leave an architectural record which will worthily express the needs, wants, and conditions of our life on the scroll of time.

Mr. Hastings and his partner, the late Mr. Carrère, whose death was regretted here as well as in his own country, have shown by the actual work which their skill has produced that they understand the nature of the problem which has to be solved, and they have given to America many buildings which will in succeeding ages be considered as masterpieces of modern expression.

Living Architecture

With Mr. Hastings' main thesis that living architecture must be the product of continuous and orderly development, taking place as it did in the past automatically, we are heartily in agreement, as also with his expressed views that this development should grow and form a chapter of the Renaissance.

We do not understand the logic of those who find in the work of the Greek revival architects an inspiration for the satisfaction of present wants. To us most of the work of that class is as much a "revival," pure and simple, as the Gothic, while in a way it has not one advantage of the latter in that it is not, like the Gothic, indigenous to the soil.

In the work of Peruzzi we see how the refinements of Greek architecture may affect work which is purely and characteristically Renaissance, while that of Cockerell largely appeals to us because, though more purely Greek in detail, it was the work of one too great not to feel the influence of the Renaissance, of which he may perhaps be regarded as one of the latest exponents, or perhaps he took a midway position between the Revivalist and the exponent of a living tradition.

In such work, however, as that of Greek Thompson, interesting and able as it undoubtedly is, we feel we have architecture which is an anachronism as expressive of the wants of the living world to-day.

Grecian Architecture

Recent investigation tends to show the greater share which the architecture of Greece had in that of Rome as compared to other influences, and it is certain that the attempts to express our wants and needs in foreign terms would be alien to the whole spirit of ancient Greek art. The lesson to be learnt from the latter is one of refinement of form and exquisite proportion, but not that of detail, by which those feelings were expressed in a different age and under other conditions.

For these reasons we hope that a certain tendency now manifest in the work of many members of the architectural profession will not be the genesis of a sustained movement, as we are convinced, with Mr. Hastings, that the true line of progress lies in the direction of a development of the Renaissance from the point from which it degenerated into an aftermath of revivals.

Nor do we think we need be too anxious that our

architecture should be national; the wants, the needs, and the conditions of civilised life are much the same all over Western Europe, and it is natural that the architecture by which they are represented should be of the same nature.

When a journey of a hundred miles was an event it was natural that architecture should be national and even provincial in its expression, but the educated man of to-day is frequently as conversant with the buildings of the French Renaissance as with our own contemporary work, and it would be mere affectation to bar one source of inspiration while accepting another.

Renaissance Work

It is more to the point that our architects should have the knowledge of the work of the Renaissance and the aptitude for expressing their thoughts through its means, and that, no longer confronted with a perplexing choice of style, they should naturally and easily express their conceptions and the wants of structure in a common and accepted language, because originality worth having must always be an originality of expression, and not one arising from the use of unfamiliar words, which, unfortunately, is a parallel to the originality to be found in the work of many modern designers

A species of uniformity in detail has generally been a marked characteristic of the work of the architects of the Renaissance, accompanied by thought in the disposition of mass and planning and grouping, which show that, alike with the creators of ancient Rome, these were the matters which to them were paramount and important.

We are afraid that Mr. Hastings would find in this country even more of that craving for a novelty which he complains of as among the defects of modern American design. The monumental buildings now being designed and erected in the United States approximate far more nearly to the expression of organised conviction of what constitutes reasonable architectural expression than is shown in similar cases here, and for that reason, even more than their size, the American architect is, to our mind, nearer the point of recovering or recreating general architectural tradition, and we believe to this extent their recent architecture rests on firmer foundations than our own.

Individuality

We are also sure that a great deal of the individuality in which, as a nation, we pride ourselves is closely akin to the insularity of ignorance, and to this extent a quality which suggests thought rather than congratulation.

To make our work rigidly Georgian to-day, if we can adapt and utilise to advantage from our knowledge of Continental work that which will give us more perfect expression of our own wants, is to help to perpetuate a spirit of copyism which will be destructive of progress; but to conform to a general type of design which is understood and practised throughout the length and breadth of the country is, on the other hand, the only way by which we can expect to regain architectural conviction.

The expression, "Happy is the country which has no past," has in it a certain application to architectural development, and the greater comparative advance of architecture in the United States of America is due to the fact that the want of any considerable legacy from the past has necessitated a greater amount of thought for the present. A choice had to be made more deliberately and decisively than in older countries, and the absence of continuous and close association of old and new has no doubt, coupled with the excellent training of a large number of American architects, rendered their newer work more consistent and logical than our own, while in France we have an illustration which shows the immense importance of sustained tradition in the creation of architecture.—"The Builder."

R.I.B.A. PRIZES AND STUDENTSHIP DRAWINGS, 1914.

There is before us particulars of the various subjects set for the R.I.B.A. Students' Prizes for 1914, the new feature of which is the Henry Jarvis Studentship, value £200 a year, tenable for two years at the New British School at Rome, the candidates for which must be British subjects under the age of thirty, who are either Associates or students of the R.I.B.A. The competitions for the Studentship will be held in conjunction with the competition for the Scholarship tenable for three years at the School at Rome. Candidates will have to go through two competitions, of which the second will be held in the autumn, three months after the first. From the candidates first competing the Committee of Examiners will select not more than ten to enter the final competition. The time allowed for the preparation of the final design will be two weeks, and the candidate placed highest will be awarded the Jarvis Studentship, unless he prefers to take the Commissioners' Scholarship, which is offered by the Royal Commissioners for the Exhibition of 1851. The Soane Medallion and £100 will be awarded to the best design for an 'Official Country Residence for a Royal Personage in the United Kingdom," the design to include the laying-out of grounds. The Tite Prize (certificate and £30) will be awarded for the best "Imaginative Composition in Perspective in the Italian Style for an Important Fountain with which is to be associated large sculpture," the architectural treatment to be in accordance with the methods of Palladio, Vignola, Wren, or Chambers. The Grissell Prize (gold medal and 10 guineas) will be awarded to the best design for a four-storey dockside warehouse. The other well-known prizes need not be mentioned here, since their subjects are well known to students and to the profession. We trust that the foundation of the British School at Rome and the Studentship connected with it will have a beneficial effect on national architecture.

The well-known architect Professor Gabriel von Seidl, designer of the Kunstlerhaus, in Munich, and other notable buildings, died at Bad Tölz recently, at the age of sixty-five.

UNIVERSITY HOUSE, CORNER OF ELOFF AND PLEIN STREETS, JOHANNESBURG

Architect, Mr. THEO. SHAERER. Builders, Messrs. REID & KNUCKEY.

Cost over £6,000.

ANCIENT ENGLISH WALL PAINTING.

Mr. Minden Smith presided on February 26th over the eighth of the series of lectures arranged by the Carpenters' Company at their Hall, London Wall, when Mr. E. W. Tristram lectured on "Ancient English Wall Painting."

Mr. E. W. Tristram said it was difficult for one to realise the extent to which painting as a means of decoration was used in the Middle Ages in England. The popular idea was that their churches and cathedrals must have looked very much the same as now, and the remains of mediæval painting which existed were hardly sufficient to justify the belief that painting on a large scale was practised in England before the Reformation. In Italy they knew that most of the great painters' work consisted of frescoes painted on church walls. Many, like those of St. Francis, Assisi, were painted in this manner throughout, and the whole formed one large scheme of decoration. In France numerous examples had survived, but in England at first sight nothing of the kind appeared to exist, yet if they searched carefully they found the majority of churches had traces of colouring somewhere or other. Most frequently it was a dark ochre or Indian red colouring enriched with ornaments, but it was not unusual to find fragments of saints and sacred subjects. The Church of West Chiltington, Sussex, gave a very good idea of what most of this painting was like. It was very fragmentary, and it was only with extreme care that one could imagine what the church must have looked like in the middle of the twelfth century. As isolated examples at first sight these paintings did not appear to be very interesting, but if they put together all the information garnered by visiting different churches they had material for forming a good idea of what they must have been in the Middle Ages. At the Reformation the paintings on the walls were obliterated or covered with whitewash, and if the records were searched it was astonishing what a number of them were destroyed. It frequently happened that when a church was restored these mediæval paintings were discovered under several layers of whitewash, and if this was removed with care the work underneath often remained intact. Sometimes the process

was complicated by several layers of paint of different dates, one on top of the other, and when this happened it was generally found to be the case that the earliest painting was in the best state of preservation. In some cases the paintings had been preserved by accident, as those in the apse of St. Gabriel's Chapel, in the Crypt of Canterbury Cathedral, which was walled in probably in the twelfth century, and "The Wheel of Fortune" at Rochester, which was protected by the building of a pulpit. Many paintings had been destroyed by church restorations, and not a few had been seriously damaged by attempts to repaint them. The paintings in St. Gabriel's Chapel were probably early twelfth century, and Christ was represented in majesty, supported by four angels, whilst below the angels the towers of the New Jerusalem were depicted. In nearly all cases where Christ was represented in majesty He was girded about with a golden girdle, and sometimes with a two-edged sword coming out of His mouth. There was a representation of this at Bedfont, near Hounslow, and another in an Essex church The paintings at St. Gabriel's Chapel were about the best preserved of any in the country. From the information they obtained from churches in their walls they realised that painting must have been done to a far greater extent than one would otherwise imagine, and the probability was that no church or cathedral was considered complete without the whole of its walls being decorated in this way. It was impossible in a short space of time to trace the development which painting underwent, but the illustrations he would show them would give them some idea of the way their walls were painted from the twelfth to the fifteenth centuries. Of painting before the twelfth century little was left, although there was no doubt that Anglo-Saxon churches were painted in this way. When they thought of the excellence of the Anglo-Saxon sculpture taken from Selsey Abbey, and preserved in Chichester Cathedral, they had every reason to believe it was of a high order, and was probably a provincial form of what was being done in France and Italy in that period. After the fourteenth century painting was not concerned on so large a scale, as the character of the architecture prevented it, and the painting was for the most part isolated pictures and rather inferior in workmanship. Of Norman paintings they had several examples, and from this period to the end of the fourteenth century must be considered the golden age of wall painting in England. The paintings in St. Gabriel's Chapel at Canterbury were probably about 1200, and there were several examples of painting in the country almost identical in style. At Winchester in the Chapel of the Holy Sepulchre the same arrangement was used; and at Salisbury Cathedral the choir had originally a painting of the same kind, but it was restored some time ago, and practically all the original was destroyed. In the north transept, however, there were some fragments left which showed the setting-out. After the Norman Conquest the connection between England and the Continent became much closer, and they naturally expected to find a similarity in paintings on both sides of the Channel. Until the thirteenth century the arts were almost entirely confined to the monasteries, and it was only after this period that guilds of craftsmen were formed, and works were directed by the master mason or the master painter, and so on, as the case might be. Later still, in the fifteenth century probably, most of the painting was done by journeyman painters who went about from one church to another, and that no doubt was the reason for the fifteenth-century work being generally inferior in quality to the painting of the earlier centuries. They owed most of their earlier painting to the Benedictine monks. These monks travelled, and there would also be exchanges of illuminated manuscripts between the monasteries. These illuminations undoubtedly gave inspiration to the artists, and therefore it was not surprising to find the painting of the time very much like that of Italy, whilst there was also very much the same disposition of the subject. In considering the subject they had always to realise what an important factor the church was in the life of the people. The people generally could not read, and the walls of the churches presented a splendid opportunity of putting before the minds of the people that instruction which they were unable to gather in any other way. In the early period, as a rule, scenes were depicted from the life of Christ and the Virgin Mary; whilst over the chancel there was generally a representation of Christ in majesty or in judgment. Later on in the fourteenth and fifteenth centuries morality subjects became very popular, as could be seen at Arundel and at Raunds, Northamptonshire. It was not until the fifteenth century that these subjects really became popular, although they did find them even in the twelfth century. At Cockford, Essex, there remained practically the whole scheme of the decoration of a church of the twelfth century, but unfortunately it had been restored, and one could not vouch for the drawing, but the arrangements of the subjects were probably correct. Mr. Tristram proceeded to show sketches of, and to describe, the paintings in St. Edmond's Chapel at Ely Cathedral and the early paintings on the piers in the nave of St. Albans Abbey; and the traces of Norman decorations on the soffits of the arches. There were also traces of some Byzantine-looking figures almost under the roof, and the whole remains showed that St. Albans would have been completely decorated throughout in the twelfth century. During the thirteenth century there was a school of painters at St. Albans of whom the most famous was Walter, of Colchester, who painted a little before 1200. In the south aisle of the nave of Ely Cathedral one of the bays of the vaulting was decorated much more richly than any of the others, the date being probably about 1200. The lecturer exhibited a number of lantern slides of the paintings in Ely Cathedral, which he described in considerable detail, and also some of the paintings at Norwich Cathedral. During the thirteenth century the painting, which so far had been inspired by monastic ideals, underwent considerable change. A new life entered into it, making it more human, but at the same time it preserved the noble qualities of earlier work. The same subjects were represented, but the rendering of them was less abstract. Saints were treated more as personalities and less as monastic ideals, and it went on developing until in the four-

teenth century it arrived at a free naturalism in the treatment of foliage and so on. The painting of the Chapel of the Holy Sepulchre at Winchester was one of the best pieces of painting they had, and that in the Bishop's Chapel at Chichester Cathedral was most beautiful, and here one saw the transition from the Byzantine to the later style, which was much more human; it retained all the dignity of Byzantine work, but struck a human note. The transition in architecture from Romanesque to Gothic imposed new conditions on the painter, for, whilst the almost unbroken wall space of the Norman church afforded facilities for the treatment of subjects on a large scale, the division of the wall spaces and the larger windows of Gothic churches tended to confuse the painter, and, as the windows were filled with stained glass, this afforded a new field for the representation of sacred subjects, and hence the painting became more limited to ornament. As further examples of ancient wall painting in England the lecturer instanced Romsey Church; Bishop's Cleve, in Gloucestershire; Great Canfield, Essex; the Chapel House at York; the Chapel of the Guardian Angels at Winchester; Checkenden Church, Oxfordshire; St. Faith's Chapel, Westminster; Brook Church, Kent; West Chiltington Church; Norwich Cathedral; and Hale's Church, Gloucestershire. As an example of sixteenth-century mural painting he showed a scene from the life of Christ in the old Carpenters' Hall.

Mr. James Wright, ex-president of the National Federation of Building Trade Employers in Great Britain, states that another deputation is shortly to see the Chancellor of the Exchequer to urge the imperative necessity for the modification of the Financial Act in the interests of the building trade.

THE RECENT BUILDING TRADES EXHIBITION

The Building Exhibition that has just been held at Olympia was visited by over 100,000 people, which is a record attendance for such an exhibition.

THE NEW DELHI

Mr. Montagu (Under-Secretary for India) informed Mr. King, in the Home Parliament last month, that the Delhi Town Planning Committee had submitted three reports—the first report on the selection of a site, submitted after the first visit of the Committee to India; a special report on the possibility of building the Imperial capital on the north site; and a final report on the town planning of the new capital. The three reports had been printed in India and copies were now on their way to this country for presentation to Parliament.

ANOTHER UNREGISTERED ARCHITECT

Mr. H. Gibson appeared before Mr. Graham Cross in "C" Court, on 25th June, on a charge of wrongfully and unlawfully describing himself as an architect, when not entitled to do so, not being a registered person under the Act. After much evidence had been led by the Crown and the defence, accused was found guilty, and sentenced to pay a fine of £2, or in default ordered to undergo seven days' imprisonment.

ARCHITECT'S SUCCESSFUL CLAIM.

An action was brought at the West Bromwich County Court the other day by Horace Edwin Price, architect, of Whitehall Road, Great Bridge, against Sarah Jane Evans, butcher, of Great Bridge, to recover £15 15s. for professional services. Mr. C. H. Darby appeared for the plaintiff and Mr. F. Dawes defended. Mr. Darby explained that in September, 1911, Mrs. Evans bought some land in Whitehall Road, and instructed plaintiff to prepare plans for two houses, which were passed by the Town Council. Eventually Mrs. Evans changed her mind, deciding not to build; but she did not pay plaintiff his fees for the work done. For the defence Mr. Dawes urged that the houses were not erected because of the plaintiff's bad plans, and because he exceeded the amount which defendant was prepared to spend. She had paid a sum into court which she contended was all he was entitled to. His Honour gave judgment for the plaintiff for the full amount claimed, with costs.

FIRE PROTECTION IN BUILDINGS

A PRACTICAL TREATISE FOR ENGINEERS, SURVEYORS AND PROPERTY OWNERS

By Harold G. Holt, A.R.I.B.A.

Modern Methods of Fire Prevention

In dealing with fire-prevention, it has been often urged that the means and methods of fire-prevention are abundant. To requests that they should be specified, it could only be answered that they were too numerous for complete assembly, that a selection would have appeared invidious, and that, as occasion arose, each and all had been dealt with separately and at intervals. To Mr. Harold G. Holt, A.R.I.B.A., has occurred the happy idea of collecting such data in a book.

Fire protection the author divides into two sections—its structural aspect, which relates to the erection of buildings constructed to resist fire and to confine outbreaks within small areas, and the extinctive or palliative aspect, which relates to the means of suppressing outbreaks.

Fire-resisting Materials

Treating of materials, the characteristics of those that are fire-resisting are summed up under three heads: (1) The material should be neither disintegrated nor consumable under great heat. (2) When it is heated, its co-efficient of expansion should not be so great as to endanger the structure of which it forms a part. (3) When heated to a high temperature, then suddenly drenched with water or otherwise cooled, it should not contract so rapidly as to cause it to fly asunder or split. It is strange to reflect how completely these attributes of materials were overlooked in the early days of fire-resisting construction. Buildings which were almost entirely constructed of stone and iron were confidently proclaimed to be beyond the power of flames to destroy. The first of them that took fire was a place in which much paper was stored, and the heat engendered was so fierce as to disintegrate the stone and twist the stanchions. When water was poured in, the stanchions contorted so violently as to reduce the building to a mass of smouldering ruins, hardly one stone being left upon another. It was only then recognised that iron itself needed protection from fire, and must be insulated or encased.

Brick, Stone, and Iron

Of ordinary building materials, the good hard well-burnt stock brick is the most fire-resisting. Stones do not behave well in fierce heat, the best of them, sand-stone, disintegrating. Limestones quickly fail, and granite may crumble to fine sand under very high temperatures. Stone is a particular dangerous material to use for staircases, because of its deceptive appearance after being subjected to fierce heat. It has tempted people to their death by showing no outward sign of the effects of fire, and falling to pieces as soon as stepped upon. Timber in large baulks is of slow combustion, but causes dense asphyxiating smoke and, when the fire is fierce and continuous, ends by adding fuel to it. Doors made of hardwood, however, such as oak, teak, jarrah, and kauri, offer a considerable degree of fire-resistance. Wood that, having been impregnated with various chemical solutions—such as ammonium phosphate, chloride, and sulphate—is known as "non-flammable," gives out no flame when exposed to fire. Concrete is most eminently fire-resisting when properly prepared. Broken granite and burnt ballast aggregates gave the best results in a series of fire tests of concrete.

Prevention and Extinction

Internal openings and window openings, and the most up-to-date methods of fire-resistance applicable to them, are discussed under "The Planning and Construction of Fire-resisting Buildings," steel office and library fittings receiving a due share of attention, and various types of buildings being classified in accordance with the special risks to which they are subject. Two chapters are allotted to floor construction. Column protection, the protection of horizontal openings, and roof construction are lumped together in one short chapter. Fire-escapes, fire-resisting fittings, and examples of buildings, form another somewhat miscellaneous assembly, and the remainder of the book—Chapters VII. to X.—is devoted to fire hazards, methods of extinction (sprinkler installations having an entire chapter to themselves), and a series of valuable appendices giving various official regula-

tions as to fire-resisting construction and means of escape from fire, with a brief and rather inadequate glossary of technical terms. No important aspect of the subject seems to have been overlooked, but much of the valuable information which the book contains is presented in the rather crude form of fire-test reports, or of dry records of laboratory experiments. If these and other data had been more subjectively digested, and more freely discussed, the book might have been made much more interesting to read. It is, however, a work of the highest utility. The book is copiously illustrated.

THE CLASSIC SPIRIT

English architects are to-day, with a few notable exceptions, engaged in designing buildings in some variation of what may be called the classical manner. No one, we fear, will grant the dignity of a distinctive style of architecture to the medley of ill-assorted commonplace classic detail we are accustomed to see in Johannesburg. A galvanised verandah roof supported by a Doric or Gothic pillar can certainly come under the title of "free classic."

PROTECTING STEELWORK

It is customary for engineers and architects to specify, for protecting steelwork, the use either of one of the standard paints, or else of one or another of the special proprietary paints, as to the composition or true functions of which generally little is known. Certain manufacturers of so-called standard paints, he declares, have been furnishing enormous quantities of their products in the past for use on structural steelwork, although the results obtained from some of them in no way justify their use; and these manufacturers regard any attempt at reform as an attack on their vested rights, and the opposition from such sources has been one of the potent factors in preventing progress towards a full solution of the problem.

A NEW SYSTEM OF VENTILATION.

The importance of ventilation is so fully recognised, and the methods generally adopted for attaining this end are so well known, that neither subject need be discussed in the present article, which is devoted to a new system devised by Mr. Achille Knapen, M.Soc.Ing.Civ. (France), and termed by him "Differential Aeration."

It may be remarked that the term "ventilation" does not quite happily denote the action of the system in question, which, so far as theory is concerned, differs from systems of ventilation hitherto adopted in the respect that it does not provide merely for the periodical renewal of the air in the apartment or building, but aims at the continuous introduction, without perceptible movement, of a quantity of fresh air equal to the quantity of air exhausted by the occupants, while definitely eliminating the condition of confined air whether the apartment or building is occupied or not.

From the practical standpoint the distinctive characteristic of differential ventilation is that, instead of being based upon vertical air movements alone, it combines the elements of horizontal ventilation, depending for its motive power and originating movement upon the constant difference of the densities of the air inside and outside the space to be ventilated.

Instead of providing only for the extraction of light gases from above or of heavy gases from below, the new system establishes a constant lack of equilibrium in the mass of air enclosed by an arrangement of three series of inlets and outlets, of different dimensions, placed at different levels and in different walls, facilitating the extraction of light and heavy gases and at the same time the entrance of fresh air, either at the top, bottom, or middle, or at all three levels simultaneously.

The arrangement is one for which the inventor claims the effect of placing in constant relation, throughout the atmospheric stratification of any storey, all the air of the apartments enclosed by the exterior walls of the building.

In buildings where large volumes of air have to be dealt with the employment of mechanical ventilation may be necessary in order to ensure adequate results,

but in small buildings the renewal of the atmosphere can be effected by utilising natural laws, the operation of which in differential ventilation is made clear in the following statement of the principles constituting the basis of the system.

It is assumed (1) that each room, when the doors and windows are closed, should be continually in communication with the outer air and with the interior air of the building by means of openings capable of regulation, and arranged to obviate perceptible draught; and (2) that the air inlet and outlet openings should be of dimensions exactly calculated in every case, and should be placed at different levels and in different sides of the room.

In a building provided with such means of communication the air of all the rooms and other interior spaces on each storey is in permanent contact at various levels, and is also in communication with the outer air, even with all doors and windows closed.

Consequently the air in every room or other interior space will be set in motion by every difference of density caused by interior or exterior variations of temperature. These differences result in the circulation of all the air between the walls pierced by openings, and in the entry of fresh air, and the exit of vitiated air in quantities proportional to the differences of atmospheric density.

The form of the wall openings adopted in the differential system is such that the difference of level between the inner and the outer end permits the circulation of air in opposite directions in the same conduit, and to a certain extent establishes automatic regulation of the air entering and leaving the building, according to the differences existing between the tension and the pressure obtaining in the two places, and due to the cold or heat, humidity or dryness, and the density of the fresh and vitiate air.

If these differences are very great, the movement of air may be excessive, and therefore the openings are fitted with shutters by means of which the circulation can be regulated in case of need.

It should be noted that the arrangement is one causing horizontal movements of the air between the opposite sides of each room, thus establishing ventilation similar to that secured by the use of open windows along two opposite walls. At the same time, however, the vertical movements mainly relied upon in ordinary methods are also utilised in the new system.

The inlets and outlets are arranged as follows: Ducts with apparatus for regulation of the openings are placed below the ceiling and as far as possible near the corners of the room to be ventilated. Other ducts are situated under the window-sills or along the sides of the window-frames, and registers are placed at the top or bottom of doors or in the skirting.

Openings intended for aeration through an outer wall are arranged with a certain amount of inclination, which not only gives the required direction to the currents of air, but also prevents the penetration of rain into the building.

The ducts employed near ceiling level are generally from fifteen to thirty centimetres in diameter, and those under window-ledges from ten to twenty centimetres in diameter, being proportioned with due regard to the dimensions of the ducts above.

In connection with the system there are three general cases depending upon the relative values of the tension (T) and the pressure (P) of the air inside and outside the building. Where $T = P$ no movement takes place; where $T < P$ the movement of air is into the building; and where $T > P$ the movement is from the building into the outer air.

The registers used in doors or on skirtings are made with three, four, or five openings, ten millimetres wide by thirty millimetres high, separated by a distance of ten millimetres, and provided with fine wire gauze to keep insects out. The corresponding plate for the opposite end of the duct has double the number of openings of the same height, but only five millimetres wide, also fitted with a screen of wire gauze.

If found necessary, the transmission of sound from one room to another can be minimised by interposing a pad of fibrous material, such as slag wool, between the two parts of the register.

It is desirable that the registers and the regulating grids for the inner end of the ducts through exterior walls should be constructed of aluminium, or, better still, of compressed paper or wood pulp, so as to obviate the condensation of moisture.

Applications of the Knappen differential system of ventilation to schools, churches, public buildings, dwelling-houses, and stables have demonstrated its practicability and efficiency, among such buildings being the Musée de Louvre, Paris; the Church of Notre-Dame de Pamele, Belgium; the Palais Royal, Brussels; the Royal Chalet, Ostend; and the Château d'Everberg, Belgium.

"STU-KA-LITE" PLASTER

This is a patent plaster which is used very largely for the same purpose and in the same way as Keen's cement. It has had some good trials in the past in this country, and is being daily more extensively used on large and important buildings, more particularly in the Cape Province.

Before commenting further upon this plaster, we give the names of places where it has been used with every satisfaction: New Somerset Hospital, Capetown; Free Dispensary, Capetown; St. George's House, Capetown; Parker's Buildings, Capetown; New Houses of Parliament, Capetown; Hiddingh Hall, South African College, Capetown; New University Buildings, Capetown; New Alexandra Hospital, Maitland; A Club, Johannesburg.

On all the above jobs large quantities were used, and it has also been extensively used on smaller jobs in schools, private houses, etc., in small quantities.

The plaster sold in this country is sold under the name of the "Alba-Slow" Stu-ka-lite, otherwise slow setting. It is absolutely fire-proof and is indestructible by ants or other insects or vermin. It contains no organic combination to decay, every atom being pure plastic marble. There are no pores in the skin to harbour disease germs, and it is inodorous and does not effloresce; it will also stand enormous tensile and crushing strains. The manufacturers claim that this plaster is the plastic marble of the Ancient Egyptians. When finished it sets as hard as rock, giving a surface as smooth as glass, which can be polished if necessary.

The plaster is in form of a white powder which requires only the addition of water for the work, and a cask contains sufficient material to cover forty square yards laid one-eighth of an inch thick. It is sold in casks of 280 lbs. nett, 300 lbs. gross weight. When set, this plaster can either be painted or distempered if it is not desired to leave it in the original white colour.

The sole agents, with sole importing rights, for the whole of the Union of South Africa, Rhodesia, and Portuguese Colonies, are Messrs. Robert Heddle and Co., 31, Hout Street, Capetown, who also carry a stock of same.

ART METAL WORK.

Some twenty or more years ago dwelling-houses in Johannesburg were contstructed in a most primitive and inartistic manner. They were constructed of badly burnt or sun-dried bricks and often of wood and iron. Such luxuries as bathrooms, fire grates, artistic and ornamental fittings were rarely included.

To-day all this is changed, and not only the rich, but also the ordinary working-man's dwelling is comfortably designed, erected, and fitted. It has usually an ornamental iron fence and gate, brass fingerplates on the doors, artistic electroliers, brackets, switches, etc., also ornamental fire grate.

Messrs. Eshen and Crone, corner of Main and Eloff Streets, Johannesburg, are producing locally at prices which compare favourably with, and in some instances beat, the Home manufacturers' price, every kind of art metal work in copper, brass, iron, and other metals, and their designs are original, antique, and in keeping with the general requirements for South African homes. They make fire grates, beaten copper signs, art iron work, standards, pendants, brackets of all designs and sizes, exactly to sketch submitted; builders' metal work, such as door plates, kicking plates, brass handles, rails, etc., and, in fact, almost anything which can be made from the common metals.

THE ARCHITECTURAL CORNUCOPIA

Out of the full heart, architecture grows rich, and, talk as we may about plain building and its majesty, we are magnetically attracted to the rich and luxuriant. We criticise St. Mark's—its tawdry domes and shallow marble skin—but all the time we are charmed. We praise the chaste simplicity of English Early-pointed, and, crossing the Channel, are ravished with the unreasoned abandon of French Flamboyant, standing spell-bound before stone that breaks into foil and cusp with all the luxuriance of leafy oak. By nature Puritan, we cling to the bare and austere; but now and again, intoxicated with the wine of thought-abundance, we the more desire that the architectural horn of plenty should outflow. It is well. We cannot for ever stand, with gloomy mien, singing the praises of the hole-in-the-wall, and denouncing every effort of generous prodigality as the outcome of licentiousness.

Too often our praise of barren simplicity is but an echo of the hollowness within; for certain it is that true richness in architecture—not to be confounded with mere tawdriness and showy elaboration—is difficult of attainment. When we habitually decry all wealth and splendour, it may be that we seek, unknowingly, to hide a shameful nakedness—poverty of idea and invention, and pauperised intelligence. Often—too often, surely—we produce the barren because we cannot bring forth the rich, and extol bare walls to divert too searching inquiry from the empty storehouse of our own mind. For, with craftsmen innumerable and material without stint, we may yet fail of attaining true richness in effect. Hence we may conclude that true and beautiful elaboration in architecture is an art. The faculty of enriching in such fashion that each stroke of work "tells" is not mere aesthetic beating of the air; least of all is it mere ornamental elaboration that may be purchased at per yard super.

A Guiding Principle

In looking round for some guiding first principle whereby richness of effect may co-ordinate with true beauty and be in accord with that constructionalism upon which all architecture necessarily stands as fundamental base, we may feel considerable perplexity. The methods of Nature dumbfound us. We go into the woods, and behold flowers strewn innumerable as the stars, and are oppressed with a sense of our own littleness and the vanity of endeavours to ape the methods of the infinite. But richness of effect is not mere abundance of things. If it were so, no art would be required to produce beauty plus richness, which would be merely and readily obtainable according to depth of purse. Much architecture that has an effect of true and beautiful ornateness is not remarkable for a vast amount of work, and in any case that which we look for is sign of mental labour rather than mere work as such. Of mere wealth of work we have nowadays a plethora. If this constitutes richness plus true beauty, then contemporary architecture is very rich indeed, and our theatres, banks, palatial clubs and offices, among the most beautifully rich buildings the world has yet seen. We know that this is not so. We should also know that there is a spurious richness that fails of purpose. Each stroke of the work did not "tell" progressively—did not, in fact, tell at all—and a fraction of the labour bestowed might have given a truer richness of effect. The mind absent in the one case, makes impress in the other. Truly rich architecture, therefore, crystallises thought. Man's mind impressed upon material

is that which we seek in beautiful architecture—not mere labour as such, not the impress of cut-steel die, nor the product of auto-machinery; and if we look round and say we fail to see contemporary architecture that we should describe as "rich," as bearing the impress of thought and invention from base to ridge of roof, as the outcome of deep thought, as the outpouring of a horn of plenty, or the generous outpouring of a full heart, it is because we refuse to be cheated with its counterfeit—ornament, so called, and mere elaboration as such.

Rich Architecture

In seeking some definite conception of what rich architecture is, and how we may attain such, it would therefore seem that we should not confound a great deal of mere handiwork with prodigality of thought. That which we look for is not mere force instilled into material, but solid evidence of someone who had, and put forth with integrity of heart, the capacity for taking infinite pains; of one who, above all, possessed that power of concentration of focus, grouping, and massing which we find is Nature's own method of gaining effect, and by the exercise of which the architect may out-nature Nature; for if we gather a handful of wild flowers and set these on an old tree-stump in a wood azure with bluebell and gold-gleaming with primrose, not all the wealth and prodigality of Nature can divert our eye from that concentration of blue and gold which, with busy hands, we have gathered in a short half-hour. Dumbfounded we may be with the infinite prodigality that strews the ground—depressed, no doubt, at our seeming impotence in the face of sublime, infinite multitudinousness—yet, by concentration and condensation, by focus, by mass, and close confinement of attention, in place of vapid endeavours here, there, and everywhere (and, consequently, nowhere), we have gained an effect that rivets the gaze. If, therefore, we seek a fundamental principle whereby our efforts at enrichment may "tell," in place of producing the bizarre, we may find this in concentration of effort as opposed to diffuseness. To enrich, let us place condensation upon condensation, and group individual concentrations; let us intelligently mass, and seek to attain, a true summation of series, so that, in place of loose and straggling features in causeless isolation, groups of tower and turret, congeries of domes, forests of pinnacles, may break upon the view like broken granite tors or pines above the Alpine crag. Fully to enrich we must seek to place enrichment upon enrichment, as when we arch a recess, mould the arch, enrich the mould by mere orderly disposition of parts, themselves again the subject of beautiful work, plane above plane, and order above order. If we proceed thus, wall-surface becomes true relief, and we appreciate the oasis because its luxuriant greenness breaks out of the arid desert. In this manner the plain building may be transformed into rich architecture by mere virtue of some specially luxuriant feature, as in many an East Anglian village church of threadbare barrenness, save for those few yards of cut and squared flints in lace-like, flush stone panelling. Little real work there may be; but it satisfies us with the impression of luxuriance, whereas a vast amount of adornment, lacking all but evidence of costliness, leaves us cold and unimpassioned.—"The Building News."

Model Answers to R.I.B.A. Examination Questions

INTERMEDIATE EXAMINATION

By G. E. Francis

Historical Architecture—(d)Italian, French and English Renaissance

Question.—Give short description of the causes which led to the introduction of the Renaissance into France, stating approximate date.

Give sketch plan of general arrangement of one of the Châteaux of Françoise Premier period.

Illustrate, by sketches, some architectural features.

Answer.—The French Renaissance, in architecture at all events, is commonly dated from Charles VIII.'s Italian campaign in A.D. 1494, but specimens of Italian and Classic art had crossed the Alps nearly a century before.

Those examples were small, and were probably due to clergy, ambassadors, merchants, and artists travelling between the two countries.

The chief force giving impetus to the movement were the wars between France and various States in Italy, the latter becoming the general battlefield of Europe.

In A.D. 1491, Charles VIII. became King of France, and at the same time claimed the kingdom of Naples. He was encouraged by Florence and other Italian States, and eventually, in A.D. 1494, started his triumphant procession through Italy.

His success was short, however, for in A.D. 1495 he was forced northward again, at the same time losing all his art treasures, etc., which he had intended taking to France.

On Charles's death Louis XII. ascended the French throne, and claimed the kingdom of Milan in addition to that of Naples.

To enforce his supposed rights, he waged war throughout Italy during the period of A.D. 1499-1504, Florence again being the ally of the French, but his armies were finally forced to retire from the Peninsula in A.D. 1513.

By means of these wars the French, although failing in their actual design, came into contact with the superior civilisation of Italy, during which time the Renaissance movement gained a strong hold upon them.

On the accession of Francis I. to the French throne, the prospects of the Reformation were the brightest possible. The majority of the brilliant hopes of the reign, however, were never fulfilled, although much was done towards the perfection of the architectural part of the movement.

The wars with Italy were continued, but after the first instance were entirely unsuccessful, Francis himself eventually being made a prisoner.

In spite of this, numerous Italian artists and workmen were introduced into France, the most notable of the former being Cellini, Serlio, Vignola, Rosso, Primaticcio, and Cortona.

Mixing with the French workmen, those from Italy imparted the New Art in all directions, and this, coupled with the efforts of the men mentioned, was successful in firmly establishing the new style.

The Château de Chambord (A.D. 1526-1544), one of Francis I.'s magnificent buildings, is illustrated, being typical of the François Premier period.

The influence of the mediaeval fortress is still to be seen in the towers, four of which are placed at the angles of the main square block.

Two long corridors, running north and south, and east and west, divide this square into four compartments, in each of which is a suite of three rooms.

Through these rooms are entered another complete set in each tower, having separate spiral staircases.

This arrangement is repeated on each floor.

At the intersection of the main corridors is the famous double spiral stair, encased in a pierced stone shell with orders of pilasters.

Question.—Describe in detail, any one of the works of Sir Christopher Wren. Mention the character of his treatment of stone, brick, joinery, and wrought-iron work.

Answer.—St. Stephen's, Walbrook (A.D. 1672-1679) is, although one of Wren's cheapest and smallest buildings, deservedly famous.

Of his some fifty churches, this is probably the only one without galleries, thus indicating how the division of a large portion of a church into two storeys diminishes the possibility of a fine interior.

In plan it consists of a parallelogram, 82 ft. 6 ins. by 59 ft. 6 ins., divided into five aisles of varying widths by rows of columns in six bays.

The division into five aisles was essential in order to obtain the necessary loftiness of proportion, the height to the underside of the flat trabeated ceilings being 36 ft.

The third and fourth columns from the east in the centre aisle are omitted, leaving a square space which is covered in with a circular dome, constructed of lead and wood, 45 feet in diameter and 63 feet in height.

The sixteen columns are well arranged, embodying the various beauties such as the Latin cross, the Greek cross, the square, the octagon, and the circle, thus obtaining out of a square room the effect of a church with nave, aisles and a crossing.

Constructional reasoning is very obvious; all rectangular forms, expressing stability, being kept below; in fact, up to the entablature all is right-angled. Above occur the oblique lines of the octagon, and the elegant circular forms of the dome.

Wren, having solved the main difficulty in a masterly and original manner, was inclined to be careless with his details, the plaster work in the dome not being very good.

Examining Wren's treatment of materials generally, one finds the same characteristics throughout—viz., large, broad expanses of brick or stone, or a combination of both, relieved with ornament of a rich and bold description.

At Hampton Court Palace may be seen excellent examples of his use of the materials mentioned, which were always of the best quality, and used to the greatest possible advantage.

He used gauge brickwork of a very fine quality, which he is supposed to have introduced into this country through Dutch influence.

At Hampton Court, the silver-grey of the Portland stone dressings is contrasted with brickwork of two different tints—dark red ordinary brick in the lower stage, and bright red, rubbed and gauged, above.

Where brick and stone were employed together, the latter was used in the central feature and quoins.

This combination in many of his buildings is unrivalled for its sober dignity, and is what one may call a certain graciousness of design.

His treatment of stonework may be seen in the nave wall of St. Paul's, where the broad, plainly rusticated expanse of stone is relieved by the Corinthian pilaster caps linked up with rich swags.

The stone carving by Cibber and his men was good, but there was too much of it, Wren seeming to have been carried away on occasion by his sculptor's exuberance.

The joinery work in the wood panelling at Hampton Court is, both in detail and proportion, of great excellence, and has a combination of boldness and refinement.

The carving, which was usually executed in limewood, was carried out by Grinling Gibbons, whose work was remarkably good.

For his wrought-iron work Wren was indebted to a French smith named Tijou, an artificer of unsurpassed excellence, who designed the beautiful gates at Hampton Court and did fine work elsewhere, all of which naturally betrays French feeling.

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