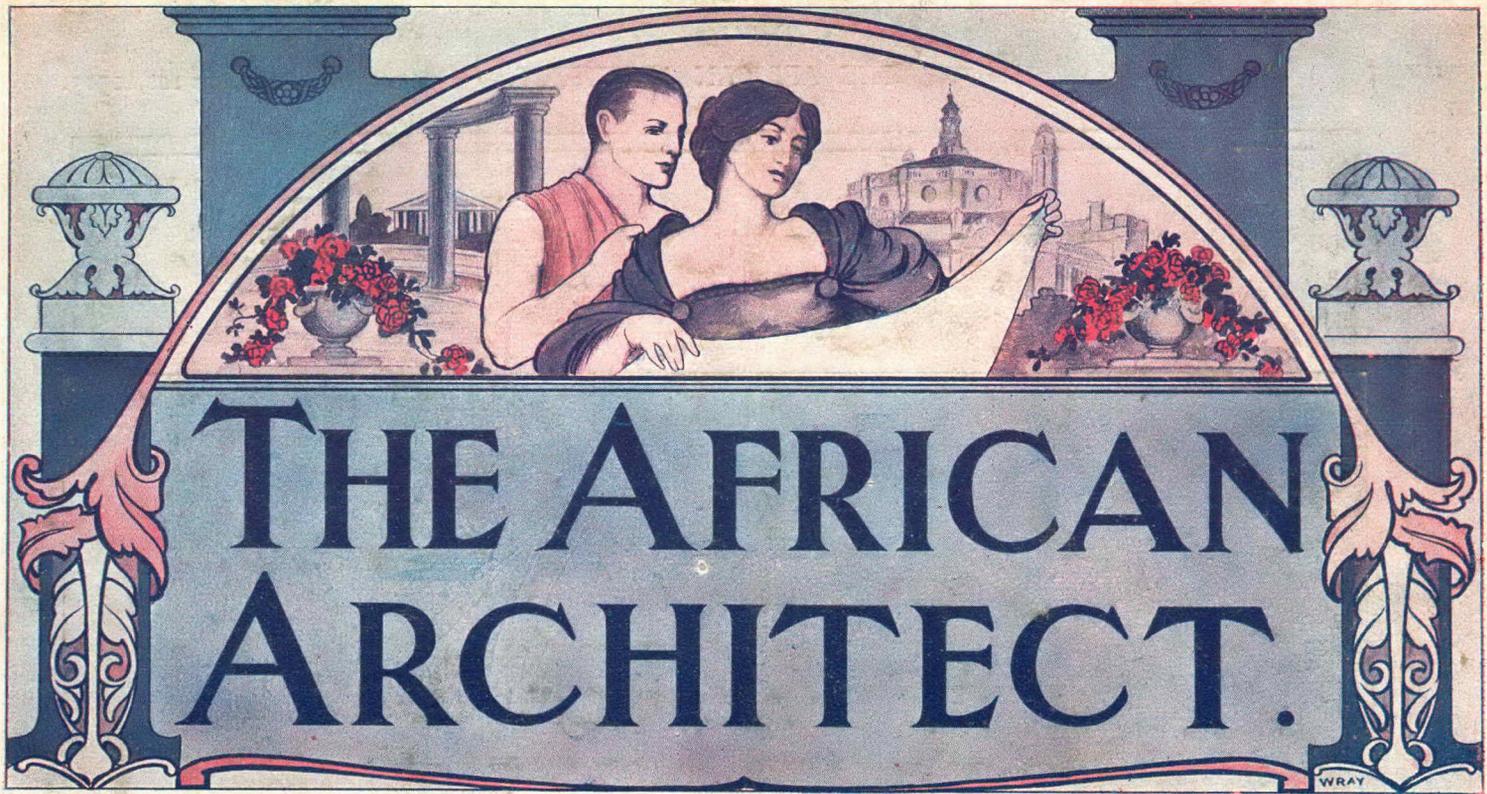


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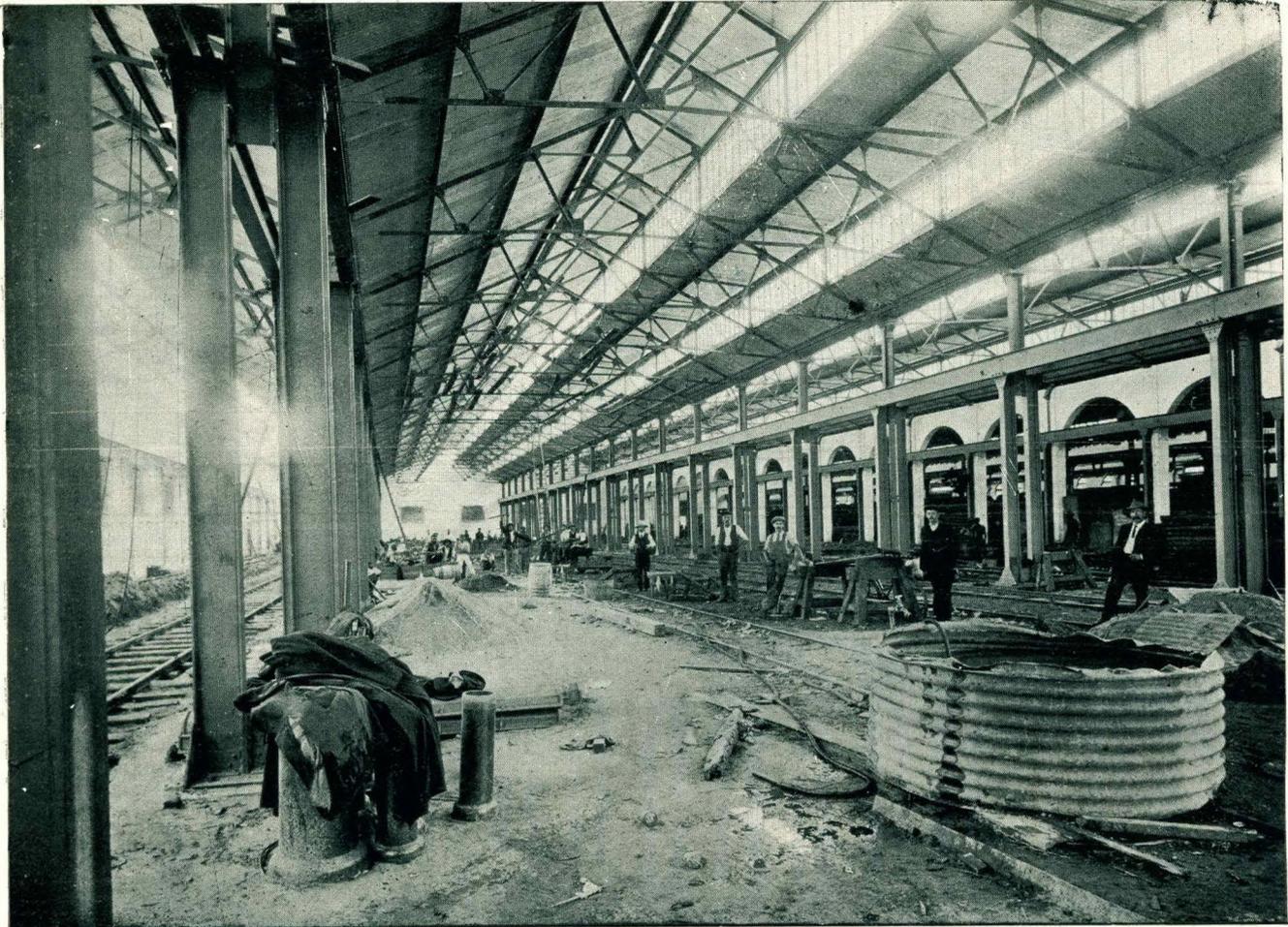
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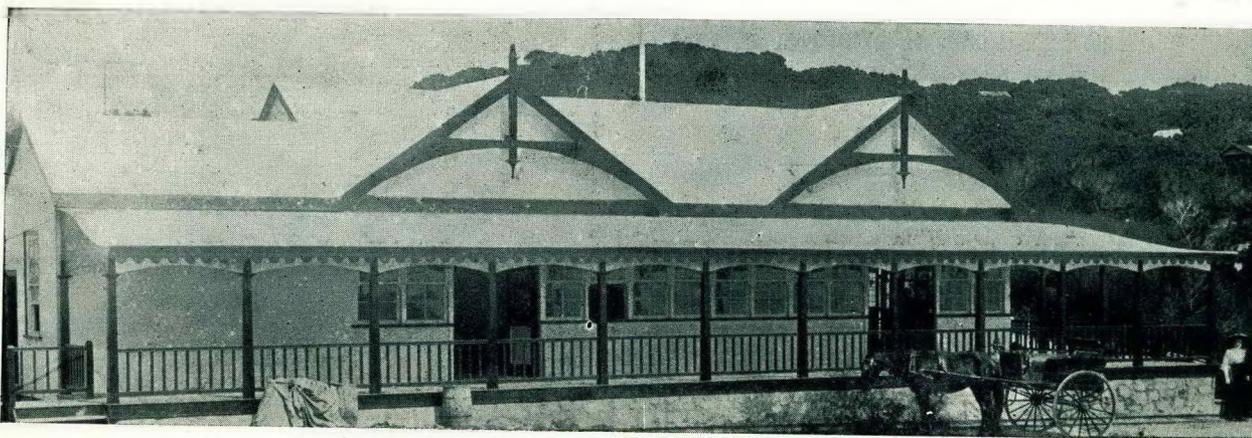
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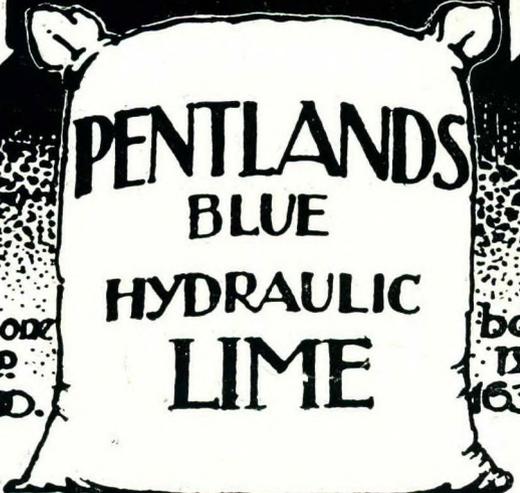
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	Page		Page		Page
Adams & Co., M. J.	xviii	General Fire Appliances	viii	Neuchatel Asphalte Co. of S.A., The	
Ainsworth, Herbert	Front Cover	General Accident Fire & Life	xvii	Inside Back Cover	
Baerecke & Kleudgen	iv	Gilbert Hamer & Co., Ltd. (Macfarlane's)	Cover	New Muckleneuk Brick Factory (Pretoria)	vi
Barker, Hugh	xviii	Giovanetti, C. W.	ii	Pabco S/S Roofing	i
Beard, Ellis & Scott	Inside Back Cover	Gwilliam, Fred	ii	Paripan	ix
Begg, George	xvi	Gabriel, Colin	xvi	Pentland Blue Hydraulic Lime	ii
Boston Wallpaper Co., Ltd.	xviii	Haine, Wilfred, Ltd.	ii	Plate Glass Beveling & Silver Co.	xv
Chevers, Jesse C.	iii	Hancock, & Co. J. C.	vi	Prentice & Mackie	xvi
Clark & Sons, Thomas	xvi	Harris & Hittinger	xi	Proudfoot & Co.	viii
C. Collins	iv	Heddie, R., & Co.	xiii	Reid & Knuckey	iii
Cyclone Gate & Fence Co.	xiv	Henderson & Gordon	Inside Back Cover	Rowe, Mar-hall & Fleming	Inside Back Cover
Drew, Harris & Sheldon, Ltd.	xiv	Japolin Enamel and Paint Company	vi	Ruberoid	xii
Douglas, Thomas	xvi	Jenkins & Co.	xiv	The Plate Glass & Beveling Co., Ltd.	vi
Eshen & Crone	iv	Johnstone, W. F.	iii	The Rowe Septic Tank	iv
Fleming, M. & W.	xi	Kinness' Patent Metal Stair Treads	x	Union Granolithic & Asphalte Co., The	iv
Fox & Co.	xviii	Levson, Leon	Inside Back Cover	United Asbestos Agency, Ltd.	ii
		McKillop, J. R.	i	United Engineering Co., Ltd.	Back Cover
		Moir & Harper	xvi	Vereeniging Brick & Tile Co., Ltd., The	xvi
		Moodie & Drennan	vi	Wallis, Jas. & Co.	xvi
		Matt.ews, J. P. & Son	xv	Weightman & Avery	ii
				Whitehorn, E. L.	iii
				Wilson & Son, J.	xvi

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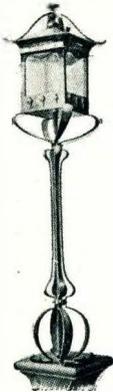
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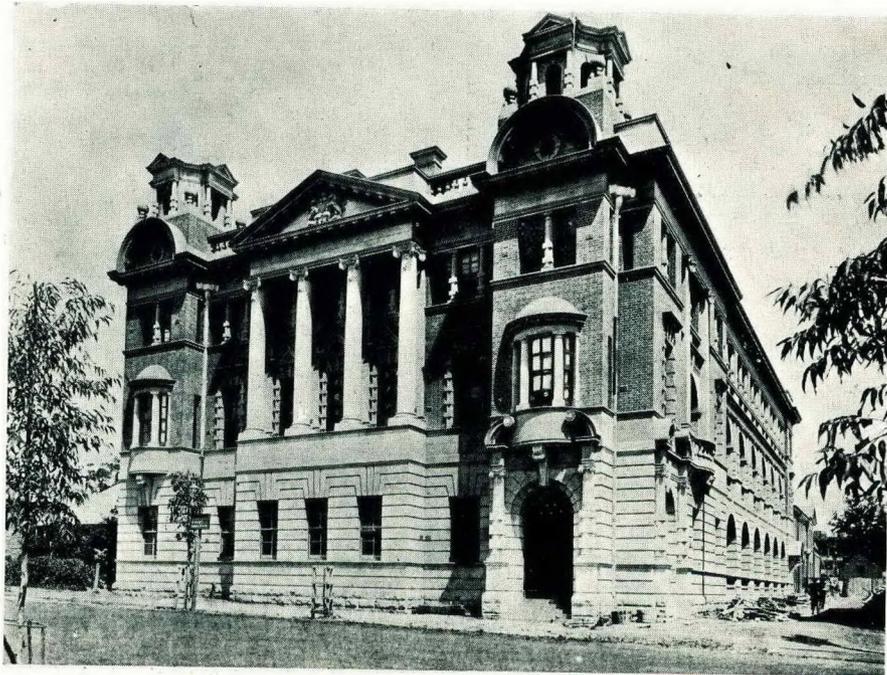
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VOLUME II.

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E. J. WELLMAN, Architect.

CONTENTS.

	Page	Page
EDITORIAL COMMENTS		
Future of Rand Architecture	193	
Organisation of Art	193	
Public School Architecture	193	
Structural Conditions... ..	193	
Utilitarian Architecture	194	
Amateur Architects	194	
Cheap Architecture	194	
Beauty and Utility	194	
SPECIAL EXAMINATION		
Registration as Architects	194	
LEADING ARTICLE		
A Registration Fiasco	195-6	
OUR ILLUSTRATIONS		
	196	
BOKSBURG'S NEW PRESBYTERIAN CHURCH		
The Winning Design	197	
ARCHITECTS' VISIT TO CHUDLEIGH'S NEW PREMISES		
		198-99
THE WORK AND INFLUENCE OF NORMAN SHAW, R.A.		
Third Article, by William Lucas, F.R.G.S. ...		200-3
SEWERAGE AND REFUSE DISPOSAL IN JOHANNESBURG		
Paper read at Sanitary Congress by Mr. G. S. Burt Andrews, Town Engineer, Johannesburg		204-6
PROGRESS OF ARCHITECTURE IN GREAT BRITAIN		
Second Article by "Delphi"		x.
MILK SUPPLY AND BYRE CONSTRUCTION		
Article by Robert Marshall read at Sanitary Congress		xii.

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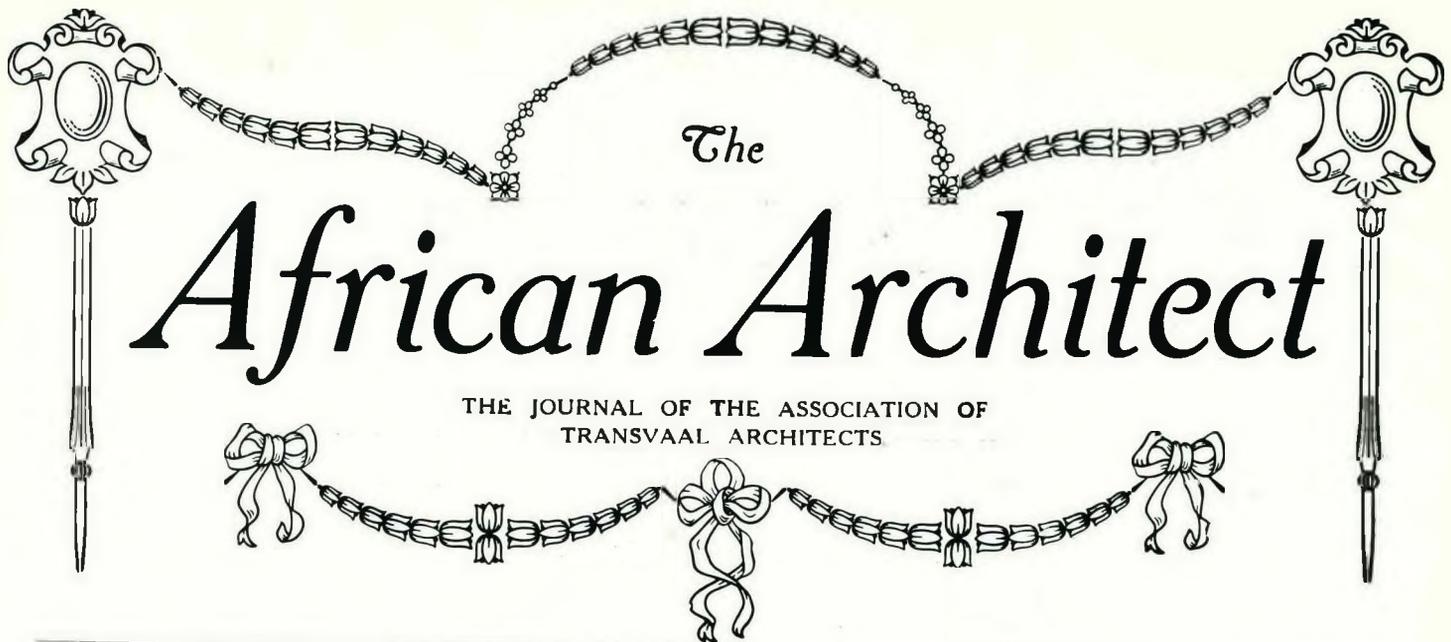
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EDITORIAL COMMENTS

Future of Rand Architecture.

The recent Budget debate may be studied with some interest by South African architects. Several notable speeches were made on the future of the Rand, the most noteworthy of which was perhaps that of Sir Lionel Phillips, who declared that he firmly believes that neither in this century nor in the next will minerals cease to be worked in South Africa. We, therefore, take it for granted that so long as the mining industry is so firmly established so long will buildings be required for a continuously growing population, and so long in this relation will the craft of the architect be in request. Judging by Sir Lionel's statement there is evident reason for optimism for both architect and builder in the future.

Organisation of Art.

In a letter to the "Cape Times" on the need of the stimulation, direction, and organisation of art in South Africa, Lady Phillips urges the appointment of a paid Director of Art appointed by the Government, and helped by an Advisory Arts Council, chosen from persons in the principal towns of the Union. Lady Phillips does not presume to offer a final solution of the position, but puts her suggestions in the hope that others may feel impelled to add their quota and thus lead to a practical result.

Public School Architecture.

The importance of architectural forethought in the erection of public schools forms the theme of the valuable report drawn up by Dr. Murison, of Durban, on medical inspection in schools. After a fortnight's examination of the pupils of the Bulwer Park School, Durban, as a test inspection, Dr. Murison came to the conclusion, inter alia, that not only was the school accommodation insufficient, but that the buildings were structurally deficient. His remarks on this head are of more than local interest—they should be

studied by architects, teachers, and parents throughout South Africa.

Structural Conditions.

"There is not an organ or tissue in the body," says Dr. Murison, "that is more affected by bad structural conditions and arrangements of school buildings than the eye. I regret to state that even in a school as lately erected as Bulwer Park School, the question of lighting of rooms used for teaching purposes was not given the consideration which it ought to have received, and the representations, both as to lighting and ventilation, by this department did not fall at the time into receptive ears. The necessity for introducing more light has become very apparent since the building was erected, and already chopping of the structure has commenced in order to increase the admission of more light. There are still, however, rooms in this new school that in my opinion are insufficiently lighted, and must be injurious to the eyesight of young children who are taught in them.

"It is with a feeling of disappointment that I notice year after year little or no improvement appears to be effected in the matter of desk and seating arrangements. In the most elementary books on school hygiene the influence of proper desk and seating accommodation is fully described. The influence of proper provision of this nature on eyesight is not the least of its many advantages, and the absence of such arrangements has also been as clearly demonstrated to have far-reaching injurious effects."

Architectural Aspect.

For years past the greatest care has been bestowed upon the architectural aspect of schools in Natal, and no other part of the country possesses finer educational establishments. But the planning has not been on the right lines, and the various School Committees have constantly pointed out grave

defects in the interior arrangements. Special provision must be made to meet the requirements of a sub-tropical climate such as that of Natal, and, as Dr. Murison points out, the style of architectural arrangement suited to Great Britain or Germany is not the best model for the South African climate. The same remark applies, as we have before observed, to our dwelling houses. The last Governor of Natal, Sir Matthew Nathan, said our dwellings showed an architectural lack of imagination, so unsuited were they to the needs of the climate. A fine exterior may lend grace to its surroundings, but a defective interior may have disastrous results on the future of our rising generation.

Utilitarian Architecture.

Recently a very striking article appeared in the "Morning Post" on this subject, from the pen of Mr. L. March Phillipps. It deals with the subject of utilitarian architecture, and was the result of a visit to the new elementary schools at Cambridge. He says he was both pleased and surprised at what he saw. The pleasure was due to the simple and straightforward, yet very characteristic, construction of the school, and to its rich, warm colour. The surprise was due to his recognition that the architecture followed none of the usual official and academic lines, but attained its ends by perfectly direct ways of its own. The character of the structure, and the readiness with which it adapted itself to its intended uses, seemed to indicate a rather unusual source of inspiration.

Amateur Architects.

Later on he learned that the buildings had been designed and erected without the help of an architect. For various reasons the plans of several architects had been disallowed, until finally the Town Surveyor and his assistant submitted a design to the Council which was approved. Mr. Phillipps sought an interview with these amateur architects, and here we had better use the writer's own words: "It seemed quite clear," writes Mr. Phillipps, "from the way they talked that neither of them had ever troubled their heads much about the artistic or æsthetic aspect of their work. They were content to look at it from a quite prosaic and practical standpoint. One, if not both, at some time in their career had had a brief experience of an architect's office, but their life's experience had been gathered from a constant devising and superintending of mere necessary useful expedients in regard to housing, draining, ventilating, lighting, and all the thousand and one requirements of modern buildings. It was their instinct to look hard at the use of a thing, but not to look much beyond it. At the same time, it was evident that they had transferred to that practical aspect much of the high regard and reverential feeling which most people bestow on æsthetic considerations."

Cheap Architecture.

From this interview one draws the conclusion that people, for the most part, have a mistaken idea of the word utilitarian. In most cases it is connected in

people's minds with cheapness. A building erected at the least possible cost, a building like a great square box, with all its windows in rows, is, they say, utilitarian. Mr. Phillipps says that as a matter of fact it is quite the reverse. In his opinion a utilitarian building is one which takes use for a guide, which is prepared to make sacrifices for the sake of use. But to take use for a guide is something very different from taking cheapness for a guide. Follow use and it will suggest all sorts of deviations and differences. A truly utilitarian building is by no means a cheap building. To dispense with ornamentation and other architectural beauties does not mean the pursuit of use. Use has claims of its own, which, if adequately met, are just as expensive as the claims of beauty.

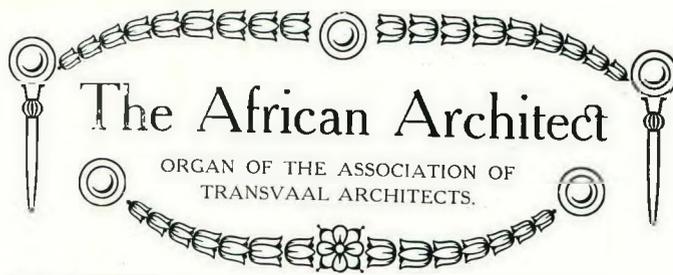
Beauty and Utility.

We do not suppose that many professional architects will be inclined to share Mr. Phillipps's admiration for amateur planning on the utilitarian principle. It is all very well to say that beauty in stone or brick work appeals only to refined tastes, to the connoisseur who knows the derivation of these things, but the fact remains that to ensure a perfect architectural work it would be impossible to dissociate beauty from utility. There must be an equal balancing of both qualities before the ideal building materialises. Even to the most inartistic mind there can be no comparison drawn between the sculptured ornaments, the Jacobean doorways, and Renaissance steps of the Cambridge colleges, and the utilitarian elementary schools newly erected there. The employment of untrained men as architects is not only wrong in principle but is a source of danger to the community, to say nothing of the outrage it inflicts upon the natural æsthetic sense.

SPECIAL EXAMINATION.

The Council of the Association of Transvaal Architects have arranged to hold a special examination of persons who have had considerable architectural experience and who are desirous of being registered as architects in the Transvaal. It is proposed to hold this examination in Johannesburg during the second week in June, commencing on the 9th of that month. Applications to sit for this examination should be sent to Mr. Cecil Alder, P.O. Box 2266, Johannesburg, not later than the 31st May, accompanied by a fee of £3, which will not be refunded if the application is accepted. It has been decided that no further examinations of this nature will be held after the 30th June, 1914.

In the "S.A. Architects' and Builders' Diary and Year Book" for 1913, by a printers' error, the address of Mr. J. E. Harrison, architect, is given as "S.A. Municipal Buildings." The correct address is a substitution of "Mutual" for "Municipal," and Mr. Harrison's box number is 2271.



MAY 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.

A REGISTRATION FIASCO.

OF exceptional interest at this juncture is the Blue Book, just issued by the Union Parliament, containing the Report of the Select Committee on the Accountants' Registration (Private) Bill. The document contains five hundred pages of evidence given—largely under cross-examination—by supporters and opponents of the proposed measure, eighteen preliminary pages embodying the Select Committee's proceedings, and seven final pages of appendices, which reproduce the petitions for and against. The proceedings resulted adversely to the Bill. Architects throughout the Union of South Africa will find much in these proceedings affecting their own professional concerns. Transvaal architects, in particular, have adopted a series of principles (published in our March issue) which must be embodied in any Union Act as a

condition of its acceptance by the profession in that Province, and their Association has convened a further meeting (for May 2nd) to draft the full details of a complete Bill embodying those principles. This draft is then to be submitted for the approval of the several Provincial Institutes, or Societies of Architects, throughout the Union, as a preliminary to jointly approaching Parliament. We have thus, in our own measure, arrived at the preparation of the details. Perusal of the Blue Book reveals the fact that, of the seventeen days' hearing accorded to the Accountants' Act, by far the greater part of the time was occupied in an exhaustive discussion of detail. At this stage in our own measure we may, therefore, be best advised to acquire such further experience as may thus have become available. Unfortunately, the report affords us no clear finding upon any one of the many contentious points raised. The opposing petition, drafted by skilled legal hands, contained no less than thirty clauses of objections to the Bill, and in the course of evidence these objections were increased in number. The Select Committee took the line of least resistance. Avoiding any detailed reference to the matters raised in the course of enquiry, they (by four votes to three) effectively burked all further discussion in the House by reporting "that the allegations set forth in the Preamble had not been proved." It is evident that the exigencies of Parliamentary business are not unduly hampered by considerations of justice to the promoters of a "private" measure. It is well to note that the opposition to the measure came entirely from within the accountants' profession. The grounds of failure can only be surmised from the nature of the questions asked by opposing counsel and by certain members of the Committee. Some capital was made out of eighteen unsuccessful attempts said to have been made to introduce such a measure to the Home Parliament. Suggestions were made that the statutory society should be constituted as a body not compulsory as to membership but yet having powers to deal with the entire profession (Question 255); that the Council should be largely composed of Government nominees (619); and that portion of the registration fees should go to the Government (705 to 709). In this latter connection one of the principal supporters of the Bill stated in evidence that the estimated receipts in fees for the first two years of the Union Society would be roughly ten thousand pounds (705 to 709)—an indication that there are

about five times as many accountants as architects in the, as yet, "unregistered" Provinces. It was objected that the Bill would exclude salaried non-practising men (467, 504, 682 to 695); that no appeal to Court is provided for in case of rejection from registration (477, 478, 613); that the Council would not be elected by the members on the register (654); that the Council alone would make the bye-laws (740 and 741); that the Tariff of Charges is not included in the Bill (742 to 746); that the onus of proof is put on the person accused of unprofessional conduct (815); that members reprimanded for misconduct would have no appeal to the Courts (832 to 834 and 922; and suggestions that the Bill is lacking in patriotic basis occur throughout the proceedings. It is impossible in this short notice to deal fully with the points of interest. We commend the matter to the notice of the profession, feeling that, in the light of this experience, some stout-hearted, fine qualities will need to be exercised in order to achieve the reformed conditions desired by architects within the Union of South Africa.

OUR ILLUSTRATIONS

WOODCARVING CLASSES

In connection with the advancement of art in this country we are pleased to be in a position to compliment the School of Arts on their effort to further a fine craft, viz., wood carving. The illustration which we give does not give the general type of work being done under Mr. Marcus in the carving class; the two panels illustrated are practically first-lesson panels, and the naturalistic design is an effort to meet the average pupil. It must be remembered that few have the opportunity of learning to draw in South African schools, and the classic design and the acanthus leaf are unknown quantities to the average beginner. But they all know the arum lily, and can see it every day—hence the designs for beginners. The more advanced pupils are doing striking and useful work. Various kinds of furniture in hand include (ladies) a camphorwood chest, a picture frame, two ornamental tables, and a fine pedicote reading desk; (men) a coat of arms and the carving for a sideboard, etc., in teak. The class is especially suited for ladies and is held in the Library Buildings on Monday and Friday afternoons.

OFFICES FOR THE ENGINEER-IN-CHIEF, NATAL GOVERNMENT RAILWAYS, PIETERMARITZBURG

This building was erected towards the end of the War. To be precise it was started in March, 1902, but owing to disabilities experienced by all contractors at that time was not completed until the beginning of 1905.

It is of fireproof construction, expanded metal lathing on steel joists being used throughout for floors

and ceilings. The other materials are the well-known Maritzburg bricks with stone and plaster dressings. Roof is covered with slates.

The principal joinery was in teak, executed in the workshops of Messrs. Eaton and Sons, of Durban. Corridors finished in imported wood-block flooring. Chief's offices in parquet.

Mr. Ernest J. Wellman, of Johannesburg, was the architect, Mr. G. B. Laffan, M.I.C.S., acting as local partner for superintendance, but the former covered some thirty thousand miles in his periodical visits of inspection.

Messrs. Wm. Holmes and Sons, of Durban, were the general contractors. Mr. Williams executed the stone carving. Mr. Wm. Farley was clerk of works, who has since acted in the same capacity for the Durban Town Hall.

THE STEAD MEMORIAL.

The President of the Royal Society of British Sculptors, Sir George Frampton, R.A., has accepted from the Executive Committee of the Journalists' Fund for the provision of a memorial to the late Mr. Stead a commission to execute a medallion portrait on a tablet, in bronze, which is to be placed in a position granted by the London County Council on the Thames Embankment.



WOOD-CARVING

Samples of 1st and 2nd term work by pupils of the Instructor, Mr. Marcus, at the Johannesburg School of Arts

List Bros., Johannesburg, for Nickel and Silver Plating, Door Plates, etc.

BOKSBURG'S NEW PRESBYTERIAN CHURCH**THE WINNING DESIGN**

We take the following from the East Rand Express, to whom we are indebted for the illustrative block reproduced in this article:—

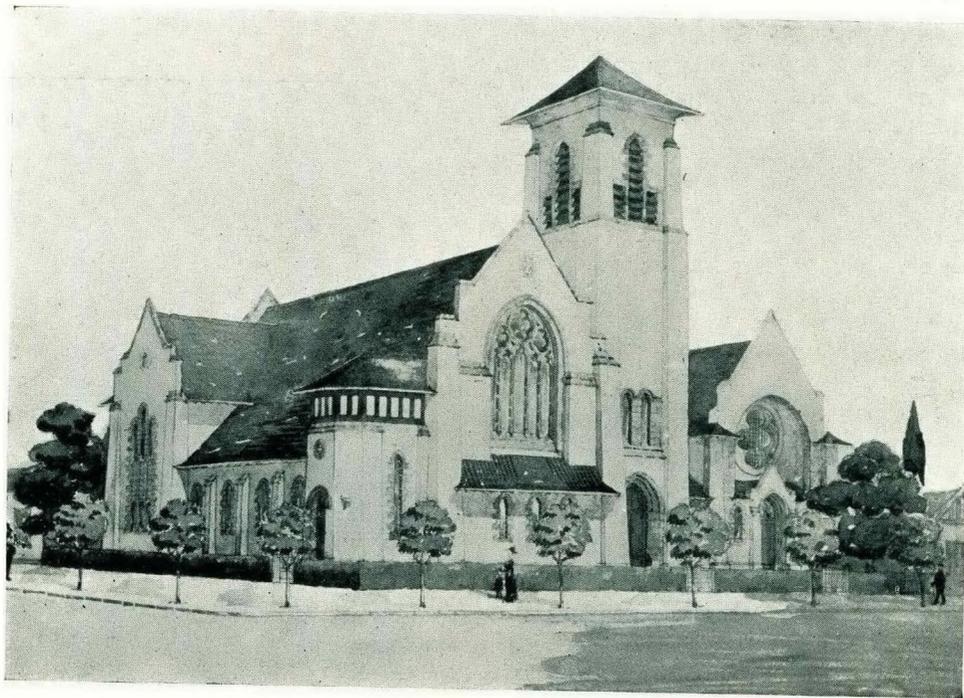
Mr. M. J. Harris, President of the South African Branch of the Society of Architects, who was appointed by the Boksburg Presbyterian Church to make the awards in the competition for the new church, has issued his report, from which it appears that the winner of the competition is Mr. W. H. Mason, well known in Boksburg by reason of his professional connection with the firm of Messrs. Gibb and Campbell.

Mr. Harris reported that fourteen designs were submitted, mostly of a high order of artistic merit and

placed in front of the preacher. The plan, however, lends itself to revision should this idea not be considered satisfactory.

Mr. Harris states that the design would look equally well in plaster with stone dressings, as shown by the perspective, or in stone, for either of which it is suitable. He is of opinion that the cost limit has been observed. The assessor concludes his observations on the winning design as follows: "With careful preparation of his working drawings, and after conference with your Board, this author should be able to achieve as close an approach to perfection in meeting the requirements as is humanly possible."

The new church and lecture hall is to be built at the corner of Joubert and Leeuwpoot Streets, facing the Public Library, and will therefore be most



Perspective View of Proposed New Presbyterian Church

evidencing considerable thought and ability. A high grade of excellence was reached in several cases and the difficulty of choice had consequently been great. Design No. 2 (that of Mr. Mason), wrote Mr. Harris, is a design of outstanding merit, artistic, practical, and effective. Exterior and interior alike will nobly express their purpose. Gothic in spirit, the exterior design is not trammelled by stereotyped forms, but boldly adapts our local methods and materials of construction to forms of beauty fresh in conception. The interior is somewhat more conventional; the open timber roof and arcaded aisle are more reminiscent of old English associations.

The assessor goes on to criticise certain features in the winning design, calling attention to the fact that the plan placed the choir and organ in a side gallery, a doubtful expedient in his opinion, although resulting in economy of the ground and in their being

centrally situated, a tickety stage being the fare to be charged to the Market Square from any part of the tramway system to be built as a first instalment.

The church is to accommodate four hundred and fifty persons, including the choir. This is the first portion of the scheme which will be put in hand at a cost of £5,000. The lecture hall, to be erected later on, is to accommodate two hundred and fifty persons, and there is to be a galleried class room for fifty children leading off from the hall.

The selection of an appropriate design will doubtless enable the Church to get that balance of support to the undertaking which will be essential before definitely deciding to go on with it. In view, however, of the support guaranteed to date, the Board is confident of success and hope to start building during the next few months.

AN IMPORTANT ARCHITECT'S INSPECTION

VISIT TO CHUDLEIGH'S NEW PREMISES

By invitation of the South African Branch of the Society of Architects, a representative body of architects visited the new store buildings erected by Messrs. Chudleigh Brothers at the corner of Eloff and Pritchard Streets, on Saturday afternoon, with a view to examining the technical aspects of the structure. The gentlemen who attended were first of all taken to the top of the building, where Mr. Moffat, who designed the structure, delivered an address. He said: Before examining the building, a few remarks upon the construction will not be out of place. The nature of the ground excavated necessitated careful thought and consideration on the question of the respective loads to be carried. The foundation varied from very soft red soil to hard soil, and soft and hard shales up to very hard rock. One the north-east corner we excavated to a depth of fifty feet without striking anything but soft clay. This necessitated heavy concrete foundations reinforced with rolled steel joists so as to distribute a load at 12 cwt. per sup. foot. Upon the hard ground and shales the load varied from 30 cwt. to four tons per foot, and on the hard rock the load increased to forty tons. You will note that the basement for a new building is exceptionally dry and airy; this was obtained by building the external walls in two thicknesses, the outer one fourteen inches and the inner one four and a half inches, with a damp-course of three-ply Malthoid carried up between. Under the granolithic floor, where soft ground was encountered, trenches were excavated leading to a sump in the heating chamber. These trenches were filled with broken metal and graded so as to dispose of any underground water. The basement is ventilated by galvanised iron flues carried up the stanchions, and up through the large columns in the front, discharging through the copper panels in the main frieze.

Difference in Levels

You will note that there is a difference of about four feet in the levels of Pritchard and President Streets, and as steps are always objectionable in business premises, the difference in the levels has been overcome by a series of slopes between each department; the same feature of easy grading in lieu of steps has been adopted in all the shop entrances. A feature has also been made of the natural lighting of the shops by means of sloping lights over the balcony floor level. I quite expect that on the sunny side, i.e., Pritchard Street, we will have too much light, but it is very easy to break down light, but a very difficult matter to increase it. The windows of the showroom have been kept high so as to permit of seven feet wall fittings being used all round without in any way interfering with the light. The system of steam heating has been installed in the basement, ground and first floor; the basement by means of pipes, the ground floor by means of radiators, sunk in the floor of the shop at each entrance, and on the showroom floor by means of wall radiators. No artificial heating has been provided for

the chambers, but each suite is provided with a glazed stoneware fireplace and mantel which can be used for cooking or heating purposes by means of coal, gas or electricity. You will note that each mantel is provided with a copper full-way damper, so that an electric stove may be used either for cooking or radiating purposes. A feature to which I would particularly call your attention is the construction of the ceilings to the corridors. These are built with asbestos sheets, with each alternate sheet hinged, so that the seven services, including water, sprinkler, light, gas, etc., that pass between the ceiling and the floor are accessible for fresh connections or alterations without the necessity of tearing down ceilings or taking up floors. A considerable amount of reinforced concrete has been used in the structure, the whole of the bases, caps, frieze, and main cornice being built of this material. It has all been cast hollow at an average thickness of four inches. As



MR. J. A. MOFFAT.

Architect for Messrs. Chudleigh Bros. magnificent building, Johannesburg, for which Messrs. Reid & Knuckey are the Contractors

will be seen, the front elevations are not adorned with soil, waste, or stormwater pipes, although there are six connections to the main sewer. Here again the main columns have been utilised. The whole of the

stormwater has been collected to the area on the south-eastern boundary and conveyed through the basement with 2.8 in. pipes direct from the municipal drains. (Applause.)

The address was heard with marked attention, and Mr. Moffat then took his confrères round and explained the points set out in his address in detail.

After examining the building from the roof to the basement, the company found its way to one of the large rooms on the first floor, where refreshments were served.

Optimistic Mr. Chudleigh

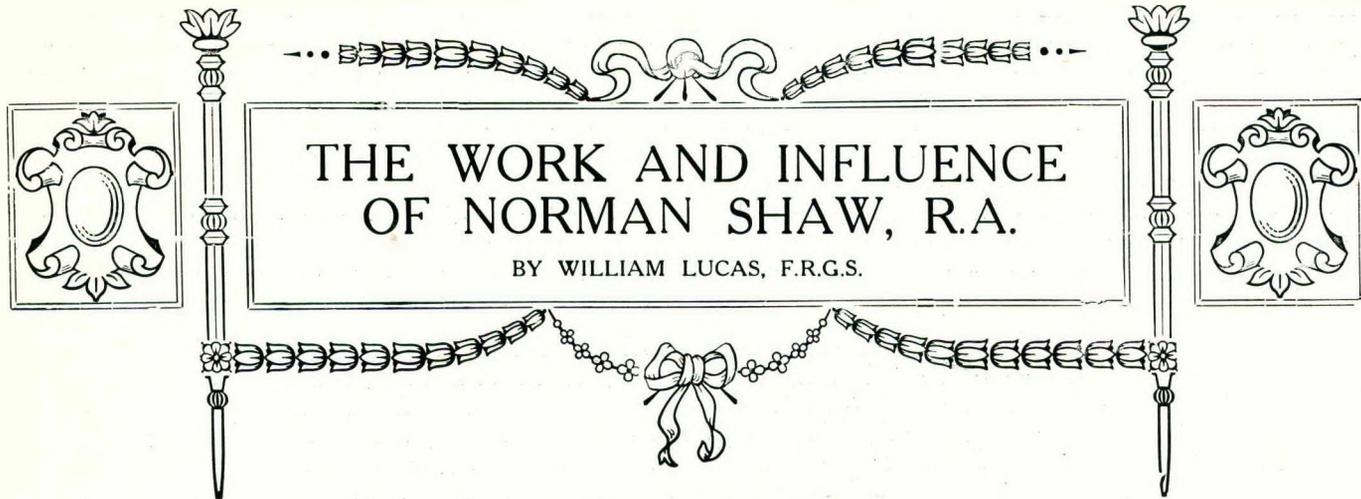
Mr. Chudleigh made an exceedingly happy and appropriate speech. He said that in the early days in Johannesburg, and before he had settled on the Rand, he happened to join the train one night at Springfontein. In those days, he said, the same etiquette was not observed as in the present time of the Train de Luxe, and he got in conversation with a gentleman who occupied the same compartment. After discussing the general topics of the day, he enquired of the stranger what he thought of Johannesburg, to be met with the remark that he did not think much of it, and that those who were building so extensively there, as Chudleigh Bros. were doing, were fools. Before retiring for the night Mr. Chudleigh acquainted his fellow-passenger that he was one of the fools. The building erected in those days, and which had lately been pulled down to make way for the present erection, was then considered a huge block, but Chudleigh Bros. were optimistic enough to believe that by-and-by the building in which they were now standing would also fall short of the requirements for Johannesburg. (Applause.) Throughout the progress of the present works, he announced, the greatest harmony had prevailed amongst all concerned—Mr. Moffat, architect, Messrs. Reid and Knuckey, the builders, Mr. Birch, the painter, and even the electrician, Mr. Drew. (Laughter and applause.) He could assure them that he was very pleased and very proud that the architectural profession had inspected his building, and he believed that what they had seen would interest them as professional men.

Mr. Knuckey, of Messrs. Reid and Knuckey, on behalf of the builders, extended to all present a very hearty welcome, and said he was very pleased to see such a large gathering of architects and his fellow-builders assembled to inspect the progress of their work.

Mr. Veale, in replying to the invitation sent out by the Society of Architects, thanked the President of that body for his thoughtfulness in allowing them the opportunity of inspecting so interesting a building. The speaker thereafter commented on the fact that he could say without hesitation that Johannesburg not only possessed the most modern shops in South Africa, but that they would compare with any city in any part of the world. He commended this to the attention of the newly formed Civic Association, and hoped that in the propaganda of that body they would make the statement public with the object of securing sightseers to Johannesburg. (Loud applause.)

Mr. Moffat, the architect, was also called upon to make a speech, which he did in a few happy and well-chosen remarks. He said that much criticism had been levelled at the building, to which he did not object. It had been said, he remarked, that the building from the first floor was resting on glass, but they had to bear in mind that the proprietor had always something to say in regard to the design of the shop. Mr. Moffat then quoted some interesting facts regarding this "plate-glass foundation," showing the value per foot of plate glass to the proprietors.

Mr. M. J. Harris said that on behalf of the Society of Architects, under whose auspices that happy visit had been organised, he desired to thank their hosts for the kind invitation extended, and on behalf of the Society's Council to express gratification that so large a gathering had resulted. Occasions such as that could not but tend to increase the feeling of comradeship among architects, and their mutual good relationship would thus be better assured than by any mere paper code of ethics. Mr. Moffat had referred to certain criticism; with him they had the privilege of belonging to the best criticised of all the professions. Anyone was good enough to criticise architecture, and they must find what consolation they could by remembering that all ideas upon the subject were in a state of flux, and that they practised in what had again become a progressive art. Centuries of a great tradition, dating back to the days of Egypt and through those of Greece and Rome, had restricted the beautiful in architecture for centuries more to forms of expression in masonry and timber. In comparatively recent years the shipbuilders, steelfounders, and reinforced-concrete engineers, had effected some startling results with new materials and methods of construction; as a consequence all the old ideas were in the melting pot, and a development was in progress which, he felt sure, would carry them beyond the narrow bounds within which the conception of architectural beauty had hitherto been enslaved. During that development they would, he feared, make their blunders; such blunders were incidental to every experimental stage, and were an unavoidable part of the process by which all human knowledge was built up. Commerce and art—the new force and the old—were well represented in that gathering, artists in a goodly host and commerce by Mr. Chudleigh, a host in himself. Apart from Messrs. Reid and Knuckey, the builders, the excellence of whose work was apparent, there were two parties who were especially entitled to some congratulation. They congratulated Mr. Moffat on having a client who evidently knew what he wanted, and such clients were rare—(laughter)—and Messrs. Chudleigh could be congratulated on the constructive skill and ability—evident on every hand—with which Mr. Moffat had met their requirements. (Applause.) He voiced their feelings in hoping that Messrs. Chudleigh would be rewarded with all the success which their noble enterprise so greatly deserved. (Applause.) This was the second such occasion upon which the Society of Architects had called them together, and he hoped to meet them all thus again. (Applause.)



[THIRD ARTICLE.]

So enthusiastically engrossed did Norman Shaw become of the reconstruction of the Regent's Quadrant and Piccadilly Circus schemes, that when his designs were approved by H.M. Office of Works, though he was then several years past the age of seventy, he felt that not only in essence, but throughout, these great works should bear his personal impress to the utmost. The result was that he drew the whole of the stone-work details of the two façades with his own hand.

In the Piccadilly Hotel (the plan of which is that of Woodward and Gruning), while the ground floor is practically that of the Quadrant scheme—a favourite treatment of Shaw's for some time past, and which was dealt with in my previous article—the remainder gives further evidence of the evolution of his mental powers; which I think it pardonable to claim was at times erratic. Here we have presented to us salient features of the Classic Ionic and of the Renaissance period of Italy, brought into immediate juxtaposition with those natural to Northern Europe; and running throughout the treatment of these several features there is the Gothic temper. The lower portion, embracing the ground and first floors, is on one plane without any substantial base or horizontal division, and pierced by sternly rigid arcading. A unit of this quite at random furnishes, without any emphasis, the principal entrance to the palatial hotel. Above, square-headed windows, spaced regardless of the arcading beneath, though brought into vertical relation to the bold columnar screen above, appear in rapid succession.

This screen, which is the feature of the building, consists of nine bays (the two end ones were enclosed in carrying out the design) against the seven arched bays below, and there is no doubt the intervening tier of narrow windows cleverly masks the anomaly. At either extremity great trussed segmental gables, filled with windows of varying dimensions, quite out of scale with the general treatment, were introduced. Behind the screen extends a terrace enclosed with walls which are in harmony with the gabled extremities. Attic and dormer storeys supply a rigid background.

Shortly after the erection of the major portion of this hotel, I stood for some time before its Piccadilly frontage; and while unable to appreciate the combination of opposing features prevalent in the design, I could not fail to be much impressed with its daring conception, which is, without doubt, substantially aided by the monumental scale of its main units.

Strand Improvements

Through the presence of Norman Shaw as consulting architect, the treatment of the Piccadilly Hotel finds itself practically repeated in the London offices of the Government of Victoria, for which Alfred Burr was architect, but with two vastly important exceptions. Firstly, all traces of vertical irregularity are absent. Solids centre with solids from base to summit, while openings are similarly arranged. Secondly, absolute uniformity of scale prevails, unless it be in the chimney stacks, which possess a ponderousness exceeding those of its Piccadilly prototype.

The whole design is so Shaw-like, and yet so unlike the treatment of Shaw, due in all probability to the handling of the architect engaged in carrying out the design.

These offices were illustrated in December, 1907, and, as far as I know, this building was the final tangible embodiment of any expression of Shaw's masterful mind in an architectural direction. That this closing embodiment, which is so strenuously in vital contrast to the principle of non-verticality more than generally adopted by him, should become associated in so forcible a manner with one of the Australian States, and, moreover, with that one which I claim as a birthplace, is to me naturally of more than ordinary personal interest.

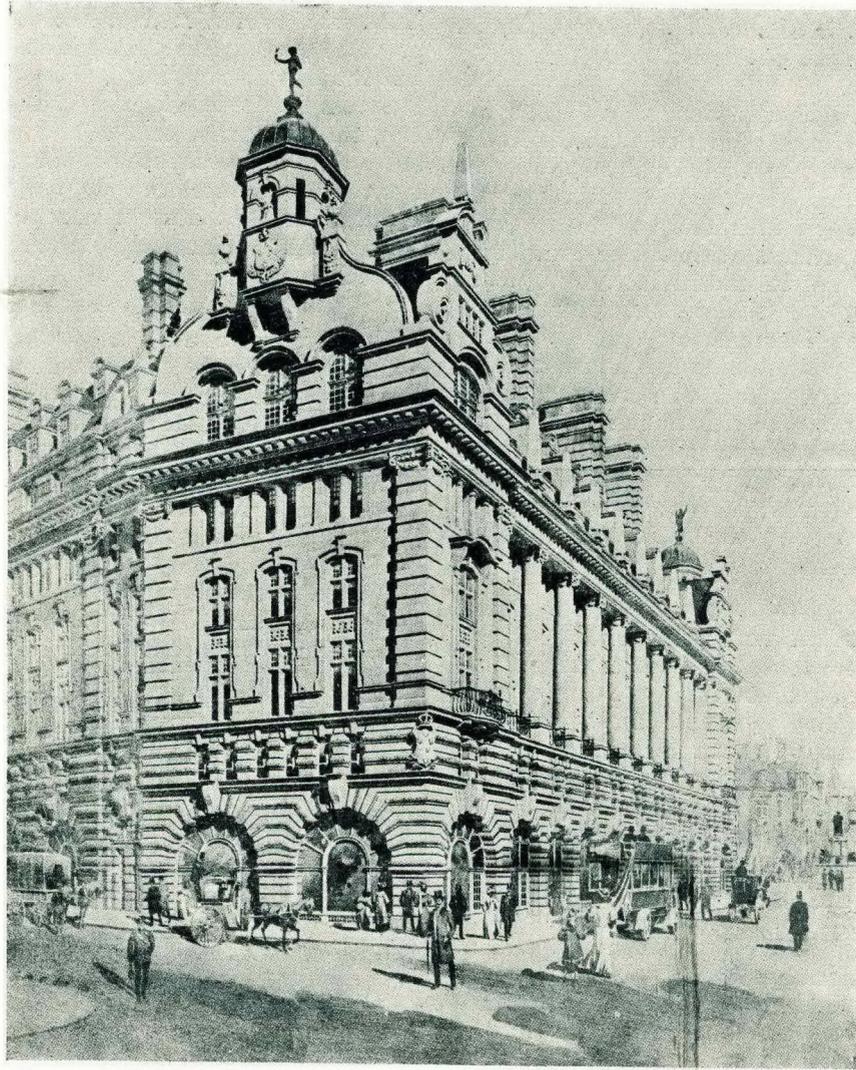
To all students of the work of Norman Shaw it is specially instructive to compare the elevation work in the offices just referred to (in conjunction with the Piccadilly Hotel) alongside that to be seen in the extension of New Scotland Yard, which was carried out at the same time at a cost of some £80,000. Necessarily there was the influence of the original

New Scotland Yard of some twenty years previously to reckon with, yet the extension has an individuality of its own. It is an exceptionally striking bit of sternness linked with playful fancy. In an arch spanning a roadway there is unyielding massiveness with only the slightest touch of relief, while its fenestral treatment finds an incongruous trespassing on the lower storeys of the new building. A pavilioned gabled block at one end vies with turretted and gabled terminals at the other. And in this design Shaw again

reconstruction of the Archbishop's Palace at Addington at a cost of £70,000; some work at Trinity College, Cambridge; the decorations of the White Star liner "Oceanic"; and a church in South Africa, at Port Elizabeth.

Competitions and Assessorship

The steadfast adherence throughout life to his early resolve never to submit an architectural design in competition with another's scheme meant the



NEW LONDON OFFICES OF THE GOVERNMENT OF VICTORIA "STRAND IMPROVEMENT"
 ALFRED BURR, F.R.I.B.A., Architect NORMAN SHAW, R.A., Consulting Architect

proved how successful he could be in lifting the turret out of the commonplace.

Versatility could hardly be greater than in these two designs illustrated the same year, the one in January and the other (as I have stated) in December, 1907.

But Shaw was nothing if not versatile, and among the many works of his alert mind and facile pencil one should not fail to note, beyond the structures I have dwelt upon, such diverse examples as the

cutting of himself off from many prospects that lay in his path to have his name associated with large public edifices.

Such an unique procedure can hardly be generally commended, though a resolve of that nature, in the case of one of exceptional powers and assured of a comfortable practice otherwise, means great advantage to architecture; inasmuch as there is peculiar freedom to develop a line of thought regardless of the current taste of the promoters of public competitions.

That Shaw's restraint in this direction was of permanent value, I think there can be no question.

Acting in the capacity of assessor, his matured judgment aided in the securing of several structures which rank as substantial gains to our national artistic wealth. To Shaw's assessorship is due the Colchester Town Hall, one of Belcher's best works; and the South African War Memorial Hall, etc., at Eton College. Then, through the joint assessorship of himself and Bodley, there is now arising Liverpool Cathedral—a tremendously powerful rendering of Gothic—though, personally, I deeply regret its architect, the grandson of Sir Gilbert Scott, has displaced the twin transeptal towers of his accepted design by a vast central octagon.

Further, the London County Council Hall was the choice of Norman Shaw in conjunction with Sir Aston Webb and W. E. Riley. In the Royal Academy of that year, 1908, I remember seeing with much interest a fine painting by Joseph Finnemore of these three assessors pondering over the statesmanlike plan which they could hardly do otherwise than select. And, most singularly, these two enormous structures—one ecclesiastical and the other secular—are from the brains of young men, and furnish magnificent tributes to the value of the open competitive system.

It now remains for me to attempt to summarise the position and influence of the great master whose life-work I have endeavoured to outline. "In the halcyon days of the seventies," to quote an expressive phrase of the president of the R.I.B.A., we find Norman Shaw beset with

The Problem of the Architectural Situation

as it besets every student who feels within himself the impelling desire to contribute something of an inspiring nature to his age. In William Burn, a pupil of Sir Robert Smirke (whose grave I know well), the young mind of Shaw found a master in whom was combined severe classic tradition with exceptional strength in domestic planning. Moreover, Burn was the restorer of St. Giles Cathedral, Edinburgh. Alongside Shaw in those pupilage days in Burn's office was Eden Nesfield. Afterwards these two were together with Anthony Salvin, an uncle of Nesfield. Deep versed in archæological knowledge generally, and in mediæval military architecture in particular, there was much of the army tactician about Salvin, who had a tremendous practice of an unique character in the restoration and extension of castles throughout the kingdom. In contact with such an office, Shaw's ambition could not but be literally set on fire. There he was in the presence of the ardour of the military spirit plus the warm element of home. Externally, he saw an austerity of design which at first must have seemed repellent; but gradually grasping the fact that the essential sense of architecture consists in defence, he saw peculiar value in large proportional stretches of plain wall surface. Internally, in those immense castellated structures he saw the conditions and possibilities of a domesticity of the highest order.

These experiences were followed by the more direct Gothic influence of Street's office, and the impress of the imperiously powerful personality of its

principal upon his vigorous early manhood. But Salvin and Street were both nearing their goal, while Shaw was but entering upon his career. (How well I remember the week when these two great masters passed away, their obituary notices appearing together.)* Then there came that closer professional fellowship with Nesfield, to which I previously referred, that so strengthened his Gothic convictions.

Shaw perceived the problem, and that it was many sided, and also that for an attack to ensure any promise of success it would have to be of a complex nature. It was further forcibly felt that the period had arrived for a measure of revolt from the orderly procession of architectural idea. Eccentricity (which Val Prinsep so impressed upon those of us who were students in the eighties was not necessarily genius) has, however, now and then to run its gauntlet and show that any prospect of effecting a solution is only by the deliberate drawing of the traditional fire towards an open attack. Architecture at that period was almost exclusively in the possession of the Gothicists.

The Basis of Attack

In judging Shaw's attack it should be borne in mind that he had seen over forty years of life when New Zealand Chambers appeared—"the first outward indication of the real Norman Shaw." To that epoch-making work, a remarkably vivid index of the wealth of the forces which are at an architect's command, I would like to further refer; but dare not trespass on the space at disposal for this.

I must, however, at this point give a summary of what I have personally noticed regarding his designing. Many of the ideas that so appealed to him, and were persisted in, such as the irregular vertical centring involving the spacing of windows regardless of those above or below, elevations rising plinthless from the surface of the ground, the slight use of moulded members for horizontally breaking up the design, and in the manner of rustication, seems to have been derived from the study of certain work in Germany and the Netherlands. Some buildings at Hoorn, a house at Munich, and the Spanish gateway at Rotterdam occur to me as having been closely studied by him. Though he does not seem to have been enamoured with old Dutch and Belgian work (or for that even with Germain in the main) there is a house at Bruges which, I think, he valued, and I feel he must also have thought highly of the old armoury at Giessen, with its ponderous range of surface barely relieved from ground to eaves, and possessing nothing in the nature of a plinth. The so-called Spanish building, in the Town Hall Square at Cologne, must have immensely suited his taste; for, with its heavily blocked courses of stone intercepted by a series of arches, and displaying above a mass of plainest brickwork, with no projecting feature between the stone and the brick, one cannot fail to be reminded of the

* NOTE—It would be a valuable contribution to architectural history if a leader in the profession, able to command the necessary material, would specially set forth before the present generation the work and influence of that wonderful Anthony Salvin.

close affinity between such and favourite features of Shaw.

As to the very unusual practice (in other than essentially Gothic design) of jumping the vertical centre, which prevails so generally in his work, it was of much interest to recently come across two historic examples in which this markedly occurs, one being a building in the Castle Place at Strasburg, and the other in the house of Domenico da Capranica—one of the few surviving specimens of Renaissance domestic architecture in Rome.

Giant's Play

As to the essential influence of Norman Shaw, this was probably far more inspiring than definitely informative. Again and again as I have looked upon one and another of his executed works, and pondered over their illustrations in the professional press, I have often wished there had been far less playfulness and closer adherence to the traditions of "the mother of the arts." Had there been contentedness with fewer units in specific structures, and more of the thread of continuity in design, I would have been far better pleased.

But one cannot fail to note that the play in his work generally is giant's play, often defensive and resistful, and not infrequently repellant, yet full of arresting charm. Perhaps a better example of this style of play cannot be given than that in the two houses in Cadogan Square, one of his earliest works. As to the multiplicity of units, and the breaking of continuity, close analysis rarely fails to detect in such treatment the meeting of deep-seated human desires, if not those of absolute necessity. Enthusiasm for the mission of architecture was writ large in his nature; and the strong personality possessed by him, and often evidenced in apparently reckless irresponsibility of design (though based upon an exceptionally cultured foundation) had left an indubitable mark on the work of his successors.

To slightly paraphrase a sentence written regarding him: "Norman Shaw unlocked the gate of a new world of ideas, and thereby considerably altered the outlook on architecture."

(Conclusion)

NEW LAW COURTS AT DURBAN

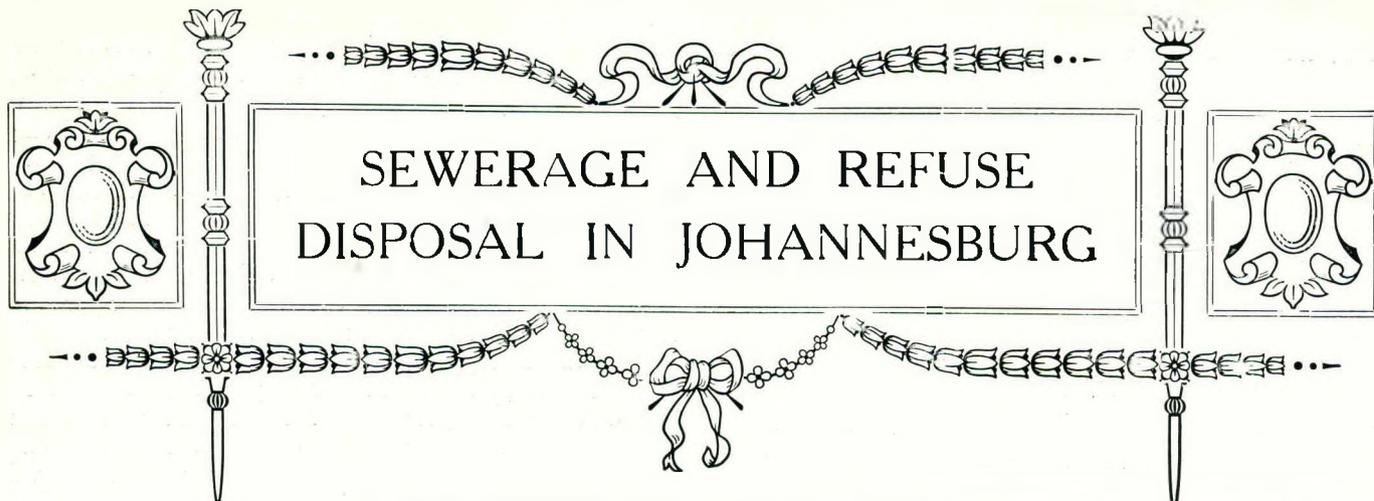
NEARING COMPLETION

Those magnificent Bayside buildings, the new Law Courts at Durban, are rapidly nearing completion. The erection proper is finished, the only work now left being the remainder of the woodwork, the laying out of the courtyard, the marble steps leading up to the main entrance, art metal work, and other fittings. The work has progressed rapidly during the course of the past few months, and the casual visitor looking over the premises could not fail to be struck by the handsome appearance of the place, even in its unfinished condition. The staff of workers are busily engaged in the plaster work and fitting up the various court-rooms, etc., and it is anticipated that the

building will be practically finished by the end of the present month. There will, however, be several small jobs to finish, as a quantity of material has still to arrive from Home. Some difficulty is being experienced in obtaining prompt shipments, especially in metal, as the manufacturers, both in England and America, have such a quantity of orders to deal with that many firms will not guarantee shipment under two or three months. Upon completion of their work the builders will hand the building over to the furnishers, and it should not be very long before the Courts are ready for occupation. Two of the court-yards are to be laid out in grass plots, while the third will be done with granolithic. The road running down from Smith Street past the Courts and into the Explanade is to be laid with macadam, and this will extend right up to the walls of the building, to allow carriages and other vehicles to turn, which is now impossible. Thus no concrete paving will be possible. The sharp gradient from the entrance down to the Bay is to be lessened, so that approach by vehicle from either end of the road will be facilitated. Although built on ground the first few feet of which is sand, no trepidation need be entertained lest the building should slide into the Bay, or otherwise collapse, as the foundations extend right down to the roadway of the Esplanade, and are solid withal. The opening of the Courts is being anxiously looked forward to, not alone by the public, but by those whose duties lay in the courts of law, who will not be sorry to forsake the musty and dusty building now in use. The beauties of the Bay and the Bluff, as seen from the windows of the new place, should serve to gladden the hearts and lighten the labours of those who toil daily in the cause of justice.

ANOTHER COMPETITION AT CANBERRA.

It will be remembered that after the fiasco in connection with this competition, conducted in defiance of the protests of every British and Australian representative body of architects, when the Federal Department Board found itself unable to recommend the adoption in its entirety of any one of the designs, it advised approval of a plan it had prepared, based essentially upon the dominating conception presented in the design which was awarded the first prize, the remainder of the plan being evolved therefrom. The Board's design has now been adopted, and instructions have been issued with a view to the survey of the site, and the commencement of other work incidental to the laying out of the city. It is now proposed that competitive designs shall be invited for the whole official block—Parliament House, Capitol, Administrative Offices, Public Library, etc., "so as to give competitors a much freer hand in the designing of a complete scheme, it being thought that if competitions were held for designs for each building separately, the value of the artistic and general ideas of the successful competitor might perhaps be absolutely lost in the design and grouping of the supporting structures."



PAPER READ BY G. S. BURT ANDREWS, M.S.A., M.Inst.C.E., TOWN ENGINEER, JOHANNESBURG,
AT CONGRESS OF THE ROYAL SANITARY INSTITUTE HELD AT JOHANNESBURG,
COMMENCED MARCH 10TH, 1913.

Some time ago it was suggested that I should read a paper before this Congress, and in a weak moment I consented to do so, at the same time indicating that the subject would be on some municipal work with which I was intimately connected. You can imagine my surprise when I saw the announcement in the circular to members that my contribution would be entitled "Municipal Works of Johannesburg." As it is my sincere wish that you should retain pleasant memories of your visit to the Rand, I have no intention of asking you to wade through an account of all the more important of our municipal undertakings. As far as my province in town work is concerned, perhaps the most interesting to members of an institute like ours is sewerage and the disposal of refuse. My observations will, therefore, be confined to these two subjects.

Population

The area of the Johannesburg Municipality is eighty-one and three-quarter square miles, and the population is approximately two hundred and fifty thousand, including some one hundred and twenty thousand coloured persons. Practically the whole of the urban portions of the area have been sewered, and upwards of seven thousand connections have been made. The total length of sewers and stormwater drains laid to date is eighty-two and fifty-one miles respectively.

The topographical features of Johannesburg and the extraordinarily large number of streets within township areas makes the drainage question, as compared with other towns, both difficult and expensive. Within the boundaries of the municipality there are five different watersheds. The south-western area, which comprises some 22.8 square miles, drains into the Fordsburg Spruit; the south eastern area, with about 17.5 square miles, drains into the Natal Spruit; the eastern area, with seven square miles, into the Bezuidenhout Valley Spruit; the north-eastern area, with 9.8 square miles, into the Yokeskei River; and the north-western area, with 15.8 square miles, into the Crocodile River. The run-off from the first two ultimately finds its way into the Atlantic

Ocean, and from the others to the Indian Ocean. It may be noticed that the sum of these drainage areas does not give the same total as the whole municipal area. This is accounted for by two comparatively small areas adjoining the eastern and western boundaries of the municipality having separate outlets. The areas now being sewered are the south-western and the south-eastern. The main outfall sewer for the former, which was completed in 1907, is 9.15 miles in length, and is designed to take a maximum flow of eighteen million gallons per day. It varies in size from twenty inches by thirty inches to thirty-two inches by forty-eight inches. About four miles of the main outfall sewer was constructed in tunnel, the greatest depth below ground level being two hundred and thirty-seven feet. Considerable difficulty was experienced in the carrying out of this work. In the tunnelling extremely hard rock was encountered, which had, as the miners say, to be "chewed" out, and in some of the shallower work the sewer had to be constructed through shifting sand and soft wet clay. It was originally intended to provide a separate outfall and disposal works for the south-eastern drainage area, but as suitable ground could not be obtained at a reasonable distance and cost, it was decided to connect a portion of this area with the south-western outfall sewer by constructing what is termed a "subsidiary outfall." This sewer, which has a carrying capacity of 9.4 million gallons per day, is 4.04 miles in length and varies in size from two feet by three feet to two feet two inches by three feet three inches.

Drainage Works

As most of you are probably aware, the drainage work in Johannesburg is carried out on the separate system with the pipes superimposed, i.e., the storm-water drains above the sewers. Although the idea is not entirely original, I believe this is the first town of any size which has adopted it generally. In the early stages of the work it gave rise to a considerable amount of hostile criticism, but, as you all know, the proof of the pudding is in the eating. The arrangement has undoubtedly turned out to be a great

success, both from a constructional as well as a maintenance point of view. The credit of initiation is due to my predecessor, Mr. D. C. Leitch, who, in spite of much opposition, had the courage of his convictions and was not afraid of starting a new thing. I must confess I was somewhat sceptical about the proposal at first, but I soon realised the advantages to be gained by the superimposed system. All pipes up to twelve inches diameter are glazed stoneware, the majority of which have been made locally. They compare very favourably with the imported article. The ruling size for house connections is four inches. Pipes over twelve inches diameter up to forty inches are made of reinforced concrete by the Council.

The Bucket System

Although the important part of the town is now sewered, there is a considerable area in which the bucket system still exists. According to information received from the Manager, Sanitary Department, no less than 29,274 pails have to be changed, some every night and others tri-weekly.

For some time past the whole of the slopwater and nightsoil collected from the unsewered area has been deposited in specially constructed intakes. These have been established in different parts of the municipal area and connected to the sewerage system, so that the whole of the nightsoil and slopwater is now conveyed to the Council's irrigation farm at Klipspruit for treatment and disposal. A great deal of care and attention has been given to the design of these intakes. Those for the reception of slopwater only are of fairly simple construction. They consist of paved roadways of sufficient width to allow a sloopcart to draw through with ease, with steel-faced kerbs on either side, and outlets with gratings fixed in the vertical face of the kerb. The paved roadway is graded so that no water can run off the surface except through the outlets provided for that purpose, which are connected to the main sewer. When the loaded tank is drawn into its proper position on the depositing apron, the valve of the tank is opened and the contents run direct on to the paving and then flows through the outlets in the kerb into the main sewer. Any kitchen refuse which will not pass through the gratings is swept up and carted away to the nearest refuse destructor. After the tank is emptied, it is hosed down and the apron washed clean. The aprons are placed side by side, and the number varies at different intakes.

Intakes for Nightsoil

The intakes for nightsoil are not quite so simple in construction. They are designed so as to permit of the emptying of tumbler carts or tanks with valves, to prevent stones, sticks, tins, silt, etc., getting into the sewers, to dilute the nightsoil sufficiently to cause it to flow freely through the sewers, and, last, but by no means least, to prevent, as far as possible, any nuisance. The construction and working of the latest type of intake may be described as follows:—

The tipping apron is similar to those for slopwater with the exception that there is a pit five feet long by three feet nine inches wide by five feet six inches

deep about midway between the two ends of the paved roadway. This pit is covered by means of a movable platform over which the animals travel until the tumbler cart or tank is in proper position for emptying, movable stops being provided to prevent any movement of the vehicle after it is once in position. By a simple but ingenious mechanical contrivance the platform is opened first by lifting slightly and then with a sliding movement by operating a lever on the outside of the platform. In the pit there is a strong movable basket-shaped two-inch-mesh screen for catching any large articles, such as tins, towels, old boots, etc., which are frequently put into the buckets. This screen is also actuated by a lever to facilitate cleaning and the removal of grosser matter. Immediately after the nightsoil is tipped into the pit, a plentiful supply of water is used, partly for cleaning purposes and partly for diluting the nightsoil. From the pit the liquid flows into a sedimentation tank where the heavier of the inorganic matter settles. Mechanically-operated agitators are provided for breaking up the organic solids. After the churning process, the sewage passes through a grating with bars fixed 1.3 inches apart, and thence into the sewer. So far, the whole of the sewage, except from the intake in Bezuidenhout Valley (Eastern District area), flows by gravitation to the irrigation farm at Klipspruit. The sewage from the last named intake is pumped into one of the main gravitating sewers through two miles of six-inch piping to a height of one hundred and eighty-three feet.

Having given you the rough outlines of the general arrangements for the sewerage of the town, I will now pass on to the disposal works.

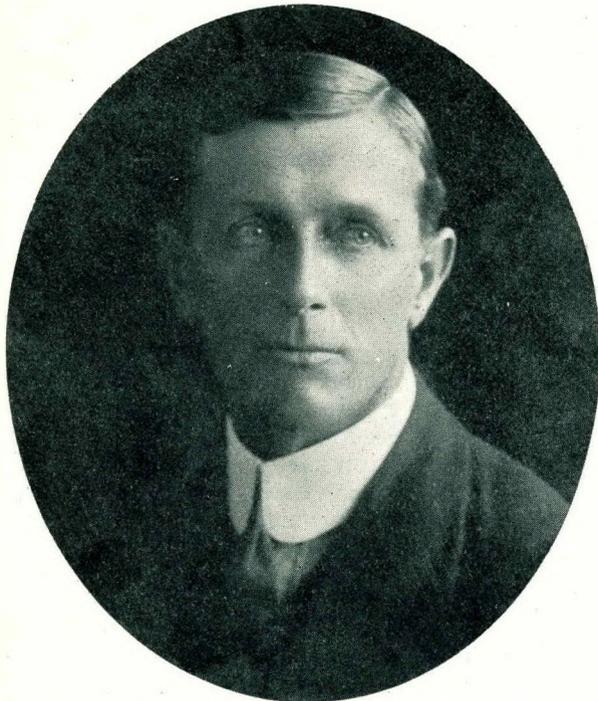
Disposal of Sewage

In consequence of the large number of outlying townships, the rocky nature of the ground, the sharp slope of some of the valleys, and the dolomite formation in the Klip River Valley, the choice of ground for the disposal of sewage from the south-western and south-eastern districts by gravitation was extremely limited. After scouring the country for miles, the present site was recommended and purchased in 1903 for the sum of £84,503. The total area is two thousand six hundred and forty acres, of which seven hundred and ninety acres are available for irrigation purposes. In addition to the disposal works, the farm contains a large native location, a dam holding one hundred and eighty million gallons of water, a washing site and drying ground, etc. The old main road to Kimberley passes through the northern portion of the area, also one of the railway lines to the Cape.

Townships have been laid out immediately adjoining the southern and western boundaries of the farm, and this, as you can well imagine, has not tended to lessen the difficulties connected with sewage disposal.

For about two and a half years after the farm was first used for irrigation purposes, sewage was applied direct to the soil without any preliminary treatment. This system might have continued without difficulty for a much longer period had it not been for a mistake so often made in connection with sewage farms, by making the raising of crops a matter of first import-

ance instead of the disposal of the sewage. This led the Council into an expensive law case, and the establishment of preliminary treatment works which might have been done without for a longer period had the farm been properly managed in the first instance. Broad irrigation has been adopted for the land treatment. The main carriers are formed in the soil and



MR. G. S. BURT ANDREWS,
Town Engineer, Sewerage Department.

have a grade of one in seven hundred. The distance between the carriers naturally depends on the slope of the ground. It varies from fifty to two hundred and eighty yards. At intervals of thirty yards and under pipe outlets are provided for distributing the sewage evenly over the ploughed areas. The total length of carriers is thirty-four miles. Stormwater from the higher ground is prevented from running on to the irrigation area by large furrows which convey the run-off direct to the stream. Below the irrigation area intercepting drains are provided in case of any possible run-off in times of heavy rains. In addition to these precautions, a belt of land two hundred yards wide adjoining the boundaries of the farm has been excluded from any surface treatment by sewage. This was one of the conditions imposed by the Government, on the recommendation of a Special Commission, before the ground was purchased. A remarkable feature in connection with the irrigation work at Klipspruit is the fact that no effluent is produced after the sewage is applied to the land, except in times of heavy rain. This is accounted for by the extraordinarily high percentage of evaporation, which, on a sheet of water, amounts to about seventy-two inches per annum, and to the porous nature of the soil. At present the average daily flow of sewage is 1,800,000 gallons, the maximum and minimum rate of flow is

3,206,000 and 967,000 gallons respectively, the former occurring between the hours of 11 a.m. and 1 p.m., and the latter between 6 a.m. and 9 a.m. The rainfall averages about thirty inches per annum.

Preliminary Treatment Works

The preliminary treatment works consist of screens, a detritus tank, three sedimentation tanks, hydrolitic tank with hydrolising chamber, and two small tanks for experimenting with the effluent from the hydrolising chamber. When these works were designed, I was much impressed, after having seen the experimental works at Hampton, with the Travis hydrolising system, of which an excellent account is given in the journal of the institute, vol. xxx., No. 7. It was therefore decided, after consultation with the Medical Officer of Health, to recommend the Council to instal one tank on the hydrolitic principle, and three ordinary sedimentation tanks. The latter were so constructed as to make it possible to convert them into hydrolitic tanks should it be found advisable from experience at a later date to do so. The capacity of each sedimentation tank is two hundred and sixty thousand gallons, and of the hydrolitic tank and chamber two hundred and seventy-five thousand gallons. As the hydrolitic tank and chamber are designed on much the same lines as those installed at Norwich by Mr. Arthur E. Collins, which are fully described in the journal before referred to, it is not necessary for me to take up your time with an explanation of the details. Experiments in the working of the tanks have been carried out for some time past, and are still being made in order to ascertain which method of treatment gives the best results. Although in my opinion it is not necessary to obtain a particularly high standard of purity in the tank effluent when there is adequate and suitable land treatment to follow, we naturally desire to secure the best results under existing conditions. Practice and experience in other places form an excellent guide in matters of sewage disposal, but without a thorough knowledge of local conditions it would be folly to lay down any hard and fast rules. Take, for instance, the hydrolising process. According to all accounts it gives excellent results in places where the sewage is of average strength, but it has not worked satisfactorily at Klipspruit, where the sewage is of an exceptionally highly concentrated nature. It contains in parts per hundred thousand: Suspended solids, 328; chlorine, 26; total nitrogen, 28; as compared with 45, 11, and 8 respectively in the average English water-closet sewage. Birmingham sewage contains 68 parts suspended solids, 20 parts chlorine, and 9 parts total nitrogen.

Experiments

As all the experiments have not yet been made, I am not in a position at the present time to say which method of working will turn out the best, but it is already fairly evident that better results under conditions as they now exist can be obtained without the use of the hydrolitic system. The experiments so far carried out include the use of the tanks in parallel, in series, in different numbers with and without screening, with and without the use of the detritus pit, and with and without the hydrolitic tank. Samples

of the effluent from each method of working have been taken and carefully analysed for comparison when the whole of the experiments have been completed.

The sludge which is drawn off daily passes through a number of valves at the bottom of the tanks, and then flows by gravitation through about three hundred and thirteen yards of eight-inch piping to the sludge trenches. These are cut three feet wide by eighteen inches deep, and form a trench with a sectional area of one square yard when the excavated material is banked up on both sides. The quantity of sludge produced daily averages about fifty tons.

About eighteen months ago another case was brought before the Council for alleged nuisance from the farm. The complainant's property was over two miles from the nearest point of the irrigation area, and he stated in evidence that he was unable to live on his property owing to the terrible smell from the farm. The Council obtained a judgment of absolution from the instance with costs against plaintiff. These costs amounted to over £1,700, not one penny of which has the Council been able to recover.

Nearly all the house refuse collected within the municipal area is burnt in refuse destructors which are of the well-known Meldrum type. The quantity collected daily is about three hundred and thirty-five tons, some of which has to be carted away to tips.

The Destructors

There are three destructors, one at Natal Spruit, with eight cells; one at Norwood, with two cells; and one in course of re-construction at Newtown, with eight cells. The original plant at Newtown was a top feed four-cell destructor, which was afterwards duplicated. The arrangement was not satisfactory for reasons that the tipping platform was too small, the refuse bins were not nearly large enough, and the weakness of construction caused by the top feed arrangements made the cost of repairs and maintenance extremely heavy. About seven months ago the condition of this destructor became so unsatisfactory that it was decided to dismantle it and remodel the plant so as to make it more suitable for local requirements. The new destructor will have eight cells, with accommodation for eight more when required.

At Natal Spruit the top feed arrangement is still in existence, but a scheme is now being considered for altering it to a front feed. It is not possible to change the top feed to a back feed at this place without altering the position of the furnaces, which would cost a considerable sum.

The average quantity of refuse burnt per cell per day is 15.3 tons. One of the greatest difficulties connected with the disposal of local refuse is the high

percentage of tins in the refuse. In the first destructor a special furnace was included for the purpose of melting down and regaining the solder from tins. It was soon found, however, that the quantity obtained from a considerable number of tins was so small that it did not pay for the cost of fuel.

All the destructors are fitted with steam blowers, but no other use is made of the power obtained. Some years ago an attempt was made by the Gas, Electric Supply, and Tramways Department to utilise the power from the destructor in Newtown for the generation of electricity, but as it was found that the calorific value of the refuse varied considerably, and that a large quantity of coal had to be used for maintaining the steam pressure, the idea was abandoned.

The Cost

The cost of the different works referred to is as follows:—

Sewerage	...	...	£230,821
Stormwater drainage	...	...	383,437
Main outfall sewer	...	...	160,047
Subsidiary outfall sewer...	...	...	49,560
Irrigation farm and buildings	...	...	86,010
Land treatment works	...	...	11,655
Preliminary treatment works	...	...	14,860
Newtown destructor (old)	...	...	34,167
Newtown destructor (new)	...	...	19,826
Natal Spruit destructor (old)	...	...	18,934
Natal Spruit destructor (new)	...	...	7,733
Norwood destructor	...	...	12,767

As the time at my disposal for the preparation of this paper has been somewhat limited, I hope you will overlook its shortcomings. No doubt you will find many points for discussion both on omission as well as commission. If so, I shall consider my endeavour to bring a useful discussion and an exchange of ideas has not been in vain. I trust the somewhat sketchy outline of the municipal undertakings referred to will enable you to have a better understanding of the works when you visit them.

Mr. Herbert Evans and family left Park Station on Saturday evening on a six months' trip to England. There was a large number of friends to see the party off and to wish them bon voyage.

* * * *

In the S.A. Architects' and Builders Year Book a printer's error gives the address of Mr. J. E. Harrison as Municipal Buildings. The proper address is S.A. Mutual Buildings, or Box 2271, Johannesburg.



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PROGRESS OF ARCHITECTURE IN GREAT BRITAIN

BY "DELPHI"

[SECOND ARTICLE]

The previous article brought us down to what was known as the Decorated, or Geometric Middle Painted, period. The Decorated is distinguished by two characteristics, which can easily be defined by the nature of the traceries of the windows, which are remarkable for harmony of form. Geometrical figures also prevail, such as combinations of circles, trefoils, and triangles. This style continued in use until the beginning of the reign of Edward III., when the design of the windows began to change, flowing lines being introduced, which permitted of an endless variety of combinations.

At this period—from 1327 to 1377—the architecture of England attained its greatest excellence, especially in respect of graceful proportion and beautiful ornamentation. As Mr. T. Talbot Bury says: "By very gradual progression, and almost imperceptible changes, had those principles of graceful design and unequalled beauty of execution been arrived at; and it cannot be denied but that the architectural art of this period was neither equalled nor surpassed in any other country or in any age." One of the most elaborate and beautiful windows of this date is at Carlisle Cathedral. The western window of York Cathedral is very full and flowing; the large and beautiful window in the south transept of Chichester Cathedral is filled with geometrical tracery. The windows at the choir of Merton College Chapel, and at the West End of Exeter Cathedral, are good examples, while some curious windows of this date exist at Dorchester Church, Oxfordshire; Cracombe, Northamptonshire; and Great Bedwin, Wilts.

The English churches that retain portions of this very beautiful style of architecture are very numerous; indeed, in the central and northern parts of the country there are few in which some feature of it is not left. Among the monasteries or larger buildings Mr. Bury directs attention to the remains

of the Abbeys of Tintern and Guisborough, which he cites as splendid specimens of the Geometric period. Selby and Howden Churches, Yorkshire, of a later date and more florid character, are noble edifices of this style. The gateway of St. Augustin's, Canterbury, is particularly good in design. Queen Eleanor's crosses at Waltham, Northampton, and Geddington are likewise interesting. Among the cathedrals is that of Lincoln, the choir of which is generally admitted to be the most perfect structure in England, both internally and externally, and is a model of the Geometric period in its earliest form. Good examples of both the earlier and later periods of this style are to be found in the Chapter Houses of York, Salisbury, and Wells; the nave of York Cathedral; the woodwork of the stalls at Winchester; the Lady Chapel and other parts of Lichfield Cathedral; the centre tower and spire of Salisbury; Beverley Minster; and the cloisters of Norwich Cathedral, the erection of which extended over a century.

From the latter part of the fourteenth century to the commencement of the sixteenth century, or the early days of Henry VIII., the Perpendicular style was in vogue; the term, however, is inappropriate, and should be the Late Painted, as being more descriptive. During the period of transition, throughout the greater part of the fifteenth century, works at variance from the pure style from which they originated appeared, yet these in point of the execution of the sculpture and embellishments, are unsurpassed. The gradual changes brought about by the Perpendicular style are chiefly visible in the increased expansion and the upright and square tendency of the tracery of the windows, the gorgeous fanlike tracery of the gromings, the four-centred arches, and the horizontal lines of the doorways, combined with the extensive decoration of the wooden roofs, and the introduction of heraldic enrichments and colour. In three of the richest and most remarkable buildings of this period—Henry the Seventh's Chapel, Westminster; St. George's Chapel, Windsor; and King's College Chapel, Cambridge—the external roofs are so flat as not to be seen from the ground.

"Non-Slipping"

FACTS ARE CONVINCING

During the past 2 years

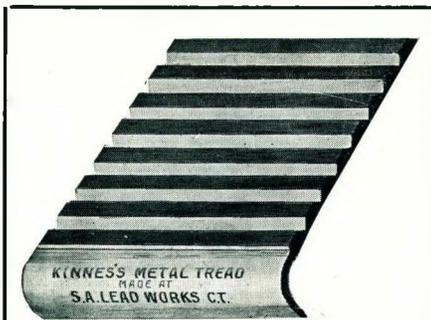
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Heynes Mathew and Co., C.T.
General Post Office, Cape Town.
General Post Office, Joh'burg.
General Post Office, Muizenb'rg.
R. M. Ross & Co., Cape Town.
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Woods, Westerton & Co., C.T.
Sea Hurst Hotel, St. James'.
S.A. Breweries, Kimberley.
All Saint's Home, Cape Town.
Chamberlain's (S.A.), Ltd., C.T.
Policansky Bros., Cape Town.
City Hall Hotel, Cape Town
(Billiard Room).
Alexandra Hospital, Maitland.
Palladium Theatre, Joh'nesburg.
L. Pinn & Co., Johannesburg.
High School Boarding House,
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They are screened by enriched parapets, which harmonise with and form a beautiful termination to the substructure.

Very characteristic of this period are the groined ceilings, and in no other style is the fan-shaped or enriched radiating tracery to be found. Good examples are furnished by several of the English cathedrals, that of Gloucester being particularly fine. It is to be seen on its largest scale and in its greatest beauty in the three Chapels above mentioned. Henry the Seventh's Chapel, Westminster, was commenced on 24th January, 1502, and completed to the vaulting before the King's decease in 1509, the whole being finished by Christmas, 1519. The design of this building has been attributed to Sir Reginald Bray, though he only lived to see the first stone laid—it was finished under Prior Bolton. St. George's Chapel, Windsor, was begun in 1476 by Edward IV., who constituted Richard Beauchamp, Bishop of Salisbury, master and surveyor of the work. Sir Reginald Bray was engaged on it by Henry VII.; its completion, however, did not take place before the early part of the following reign. King's College Chapel, Cambridge, was founded by Henry VI., about the year 1446. It was proceeded with until the accession of Edward IV. in 1461, when a stop was put to it by a seizure of the revenues. The works were afterwards partially proceeded with as the funds permitted. In 1484 the east end of the Chapel was only carried up to the top of the window, and remained there until 1508, when Henry VII. engaged to finish it. This was not accomplished until July, 1515.

Turning from the ecclesiastical structures to the dwellings of the laity, it is necessary to retrace our steps. The buildings of the Anglo-Saxon nobility, as well as those of the burgesses and common folk of England, were humble in character, and constructed of timber covered with reeds and straw. On the settlement of the Normans after the Conquest, the King's nobility and prelates erected large and magnificent palaces or castles, all of which were strongly fortified. This change was caused by the Normans finding themselves surrounded by vassals who hated them, on account of the plunder and subjugation to which they were compelled to submit. The Conqueror made large grants of land to those of his followers who had the power to build, either by their own means or by forced labour.

Among the strongholds erected during the reign

of the first Norman King, or shortly afterwards, were the Tower of London and the castles of Parchester, Canterbury, Rochester, Dover, Colchester, Norwich, Ludlow, Hedingham, Guildford, Oxford, Newcastle-upon-Tyne, Corfe, Bamborough, and Richmond, all being either square or oblong in plan. Of the round, or polygonal, the most important are Arundel, Conisburgh, York, Tunbridge, Lincoln, Windsor, Durham, and Berkeley.

The sons of the Conqueror, William Rufus and Henry I., were equally addicted to the erection of castles. In the reign of Stephen, from 1135 to 1154, the practice had become so general that in the short space of nineteen years no fewer than 1,115 had been raised—in short, everyone who could afford it built a stronghold or castle. They were all surrounded by moats, and were protected by advanced fortified works. Within the innermost enclosure of the building the keep, or dungeon, tower, was placed, the stronghold heart of the castle. This tower was four or five stories high, had walls of great thickness, and in them the passages and stairs were built; the openings were small and admitted little light. Here the owner, or constable, of the castle resided, while underground vaults were provided for the confinement of prisoners. The well was usually in the centre of this tower, and a large stock of provisions and war supplies were stored in the tower, as in case of siege, should the rest of the castle be taken, the keep could still hold out.

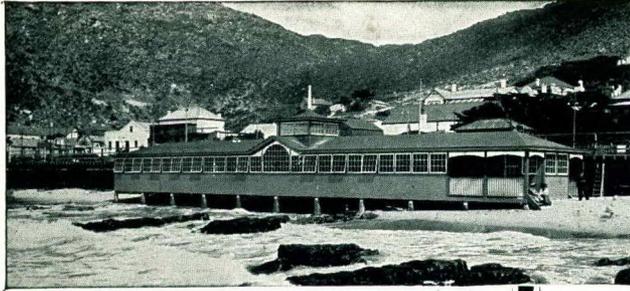
One of the most interesting of the keep towers is that of Conisburgh, Yorkshire, built by William de Warren in 1070. Good examples are also found at Dover Castle, the White Tower of London, Rochester, Guildford, Norwich, and Hedingham. The massiveness of these structures remained nearly the same until the time of Edward I., when more varied forms and lighter details were introduced.

(To be continued.)

Mr. Herbert Baker, the distinguished South African architect, who was recently honoured by being asked to collaborate with Mr. E. L. Lutyens in the designing of the new Delhi, is due at Capetown from India, where he has been hard at work for several months. Mrs. Baker and family are at present residing at their cottage on the sands at Muizenberg.

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OUR MILK SUPPLIES FROM A SANITARY INSPECTOR'S POINT OF VIEW

By ROBERT MARSHALL, M.R.S.I.,

Public Health Department, Boksburg. Paper read on Byre Construction at the Congress of the Royal Sanitary Institute, held at Johannesburg, commenced March 10th, 1913.

In considering the relation of the sanitary inspector to the question of a pure milk supply, I do not intend to re-tell the old and oft-told story of the filthy milk the public too often get to drink, or go into detail or reason why such a perfect food for babes and men should habitually be in such a state; but rather to suggest a remedy. Every person here has heard of, and probably seen, the dirty byre, the shairn-plastered cow, the uncleansed udder, and the untidy, improperly clothed milker—invariably an ignorant native. These things are too well known to you all, and reiteration of them becomes tiresome.

What the public, in my opinion, want to know is: why such a state of affairs is tolerated, and what are health officials doing to permit such a state of affairs to continue? There is ample evidence before us to prove that the number of cows supplying the public with milk that are suffering from tuberculosis is alarming enough, without tolerating dirty milk; for there can be no doubt that the insanitary conditions under which milk is often produced and distributed explain the frequency with which it acts as a vehicle

of infection in cases of scarlet fever, diarrhoea, diphtheria, sore throat, and typhoid fever; in fact, some of the milk is so dirty that pasteurisation is incapable of making it fit for human food.

Lack of Organisation

There is a great lack of organisation in respect to the granting of licences to dairy premises, and the supervision of the methods of distribution and preservation of this prime necessity (milk) from the most obvious sources of pollution.

The State Board of Health of Massachusetts in 1908, when requested to furnish the United States Senate with a report relating to the advisability of changing the milk standards, both from the public health point of view and for the proper enforcement of the criminal law affecting the sale of milk, ably replied in the last paragraph of their report: "Whilst we recognise the necessity of regulating the sale of milk by a standard, and the advantage of having this standard as high as is consistent with keeping cows in a healthy condition, it should always be borne in mind that of far greater importance than numerical standards in the preservation of public health are healthy cows kept in clean surroundings, and clean, pure milk produced, handled, transported, and delivered under sanitary conditions." Here we have from our American friends a strong confirmation of the opinions given by our own experts: it is in the sanitation of dairies, healthy cows, tidy and clean attendants, and clean utensils that salvation from an impure and unwholesome milk supply is most likely to be found; indeed, that no nuisance in connection with the premises, the animals, the persons, or the appliances should be tolerated when such a susceptible human food is being produced for sale to the public.

Now we come to the powers afforded us by our by-laws (the Public Health By-laws are similar in most Transvaal towns) to ensure the ideal state to be aimed at. In chapter v., clause 1, we find: "No person shall carry on the trade of dairyman, cowkeeper, or purveyor of milk unless he shall first have obtained from the council a licence in respect thereof." Here is the key to the door which the council has the power to unlock if they think fit; and I hold that no licence should be granted unless the premises, etc., are in all ways suitable for the trade to be conducted.

Unfortunately, there is an absence of a standard of construction and requirements necessary to guide health officials in deciding when a set of premises are fit or unfit; and it is often found, especially in smaller municipalities, that sentiment or influence of town councillors with their officials determines whether a licence be granted, and not the fundamental principles of public health, as it ought to be.

The municipalities have the right and it is their duty to define the conditions under which milk may be sold within the area of their jurisdiction, and they should not neglect that duty, but seek the co-operation of public opinion and their officials in maintaining a high standard of efficiency prior to the granting of any licences.

We have the dairyman who appreciates the value of a well-constructed, sanitary dairy, with abundance of light and ventilation, tuberculin-tested cows, etc.; and, on the other hand, the dairyman who leaves the

milking of the cows, the bottling, cleaning, and distributing of the milk to the care of the native—and yet both these classes may be found in the same area governed by the same municipality. What inducement has the former to continue his forward policy: the same price is paid for the milk from either place; in fact, the latter, by reason of his insanitary conditions and consequent low cost, often undersells the former, and unfortunately a large section of the public clamours for quantity, in preference to quality with its attendant beneficial effects on the public health.

Byre Construction

Should, however, a municipality so disregard their duty to safeguard the health of the public that such differences in premises and working should exist? Emphatically no; and it is with this end in view that I would suggest that all premises to be licensed should conform with certain conditions:—

Construction.—The byre should for preference be constructed of brick and plastered inside, so as to present a smooth surface easily lime-washed. The height of the walls should be nine feet, with a pitched roof, ventilation provided along its entire length, preferably at the ridge, and a window to each two stalls. The floors must be of cement concrete.

Size.—The size of the byre will depend on whether it is to be on a single or a double-row scale; where it is a single row, the width from wall to wall should be fourteen feet, allowing seven feet six inches for each stall, two feet for the gutter, and four feet six inches for the passage. Many prefer a narrow gutter, but, in my opinion, the two feet facilitates cleansing by a bass broom or a square-nosed shovel, and the animals soon get accustomed to it. With a stall width of four feet six inches for each animal, six hundred cubic feet of space is provided per animal. The floors and gutters, lengthways, should have a fall of at least a quarter of an inch per stall, and the gutters should drain to a cement concrete pit outside the building. A receptacle of cement concrete, with a slope towards the back, should be provided for receiving the manure. The number of animals kept in any premises should not exceed the stable accommodation.

The dairyroom should be built of brick, plastered inside; the walls to be nine feet high, and a pitched roof with louvres at the ridge for ventilation. The floor should be of cement concrete laid with a slight slope towards the door, and at no part less than six inches below the level of the ground adjoining. All doors and windows should be provided with fly screens. Seamless milk cans and milk pails, Canadian type milk bottles, new and clean cardboard stoppers, bottle brushes, clean milk stools, towels, overalls, and soap should always be used. A hot-water boiler should be built in the yard, and hot water available at all times to encourage cleanliness amongst the workers; the system of obtaining hot water for the utensils from the kitchen of the dwelling-house should not be allowed.

Water Supply

This should, wherever possible, be from the town mains; but if from wells, the municipality should not grant a licence until they have taken a sample of the water and the analyst has reported favourably upon same. Secondly, the wells should be well built,

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covered, ventilated, and a pump provided for drawing the water.

Personal Supervision by Licensee.—The municipality should not grant any licence unless the licensee undertakes to have some responsible white person in charge of the details. An illustration of what may happen if he neglects this very essential point might be here given: I once saw a native take a small pail into which he ran some water from the tap, he then sat down beside the cow (his stool was an empty oil drum plastered with shairn). He scooped some water out of the pail and washed the cow's udder, and then dried the udder with the cow's tail, that was also shairn plastered. After that, he emptied what water was left into the gutter behind the cow, and proceeded to draw the milk into the same pail. One can imagine the quality of milk produced at that dairy, and yet what else can we expect when this important food supply is left to the care of such an one—need we be surprised at dirty milk, dirty utensils, etc.?

Milk Samples.—The taking of milk samples should be done with extreme care and method to ensure faithfulness to the seller. In dividing the sample, usually from a wide-mouthed bottle into three small ones, a small funnel should be used. The milk should be poured into the three small bottles, emptied back into the wide-mouthed bottle, and the three small bottles again filled; this ensures thorough mixing and is the fairest way to seller and purchaser.

We often hear in police court cases where the seller is being prosecuted for the sale of milk not up to the required standard of three per cent. of milk

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fat, the old argument of appealing to the cow; and in too many cases the magistrate acknowledges the fact, but I would like to suggest a remedy, i.e., that all municipalities impress upon the Government, in the absence of municipal analysts, the necessity of lowering the fee charged for milk analysis so that every cowkeeper can, at little cost, ascertain the quality of milk obtained from each cow. Were this done, we would soon hear the last of that staid yet too often successful appeal to the cow.

Bye-Laws

Any municipality may make by-laws for the due and proper control of their milk supplies; and I offer a few suggestions on points that I consider are worthy of attention:—

- (i.) Where a person sells from a cart, van, or other vehicle within a district, milk supplied from without a district, such cart, van, or vehicle shall for the purposes of this by-law be deemed premises within the district.
- (ii.) For the council to make by-laws concerning water supplies of dairies and their appurtenants. (This is especially necessary for dairies outside the district and producing milk sold within the district.)
- (iii.) That the council shall, on issuing a licence to any person, furnish the said person with a copy of the dairy by-laws free of charge.

Safeguard from tuberculosis, etc.:—

- (i.) It shall not be lawful for any person knowingly to consign, sell, offer, or expose for sale for human food, the milk of any cow apparently suffering from tuberculosis with emaciation, or from tuberculosis of the udder, or from

any sore on the teats accompanied by suppuration or bleeding, or from any disease liable to infect or contaminate the milk.

- (ii.) Every dairyman who has in his dairy any cow which is apparently suffering from tuberculosis with emaciation, or from tuberculosis of the udder, or from any sore of the teat accompanied by suppuration or bleeding, or from any disease liable to infect or contaminate the milk, shall forthwith give written notice to the medical officer of health, stating the situation of the dairy.
- (iii.) No dairyman shall sell or otherwise dispose of any animal suffering as aforesaid, unless he shall have given written notice to the medical officer of health stating the destination of the animal and stating the name and address of the person to whom the animal is consigned.
- (iv.) The medical officer of health, municipal veterinary surgeon, or any sanitary inspector may at any reasonable time require any cow to be milked in his presence, and may take samples of the milk, or, if he so require, a sample from any particular teat.
- (v.) A dairyman shall not be liable to any action for breach of contract if the breach be due to an order under this section.

Finally, I desire to give expression to my sincere regret that, though we have advanced in many branches of sanitation, our milk supplies have not received that attention which it should; but I trust we may ere long see the standardisation of dairy premises prior to the granting of licences, and thus restore the heritage due to the future generations—that of a pure milk supply.

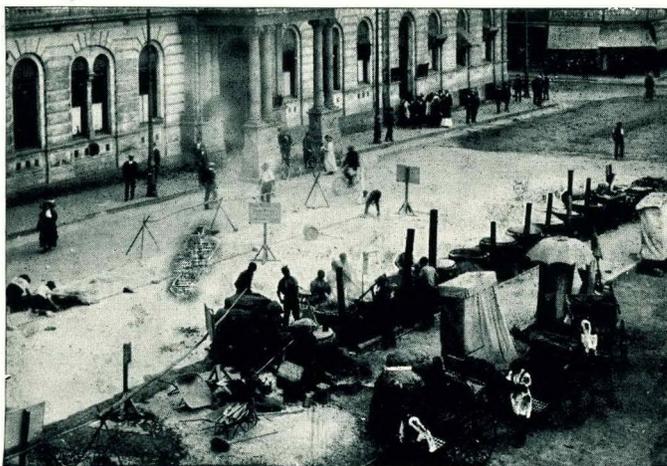


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In the Court of Appeal, London, on January 16th, before the Lord Chief Justice, Lord Justice Farwell, and Sir Samuel Evans, two appeals, the one by Messrs. Stott and Sons, architects, of Manchester, and the other by Mr. A. H. Stott (a member of the firm) against a decision by Justices Ridley and Bray, in a Divisional Court in July last, was heard.

Mr. Martelli, K.C., who appeared for the appellants, said that the case came up in the course of the winding-up of the Pansy Spinning Co., Ltd. The company was incorporated in October, 1907, with £100,000 capital, in twenty thousand shares of £5 each. It was formed on the top of a boom in the cotton trade, but unfortunately after that time there was a slump in the trade, and the company did not proceed to build the two cotton mills at Wigan for the establishment of which they were incorporated. Soon after the incorporation of the company the directors passed a resolution to appoint Messrs. Stott and Sons the architects, at a commission of five per cent. on the cost, for the two mills which the company intended building. Although the mills were not built, Messrs. Stott did a great deal of work in the preparation of plans, etc., and on this account the judge had decided that they should receive £250; but there was also a claim of some £8,475 for architects' fees. Mr. A. H. Stott, who was a member of the firm of Stott and Sons, lent the company £1,500 to pay the firm the reduced sum of £1,500 for fees, and subsequently, when the company went into liquidation, the Official Receiver said the only sum that Messrs. Stott and Sons were entitled to was £250 in respect to work already done, and he said the £1,500 which had already been paid was to be set off against the £250 due to them. The case went before the Wigan County Court on the two claims, one by Messrs. Stott and Sons for architects' fees and the other by Mr. A. H. Stott for the £1,500 lent to the company, and for other matters. The County Court Judge held that the Official Receiver was right. The grounds of the claim by Messrs. Stott and Sons were that by a resolution of the directors taken in conjunction with the memorandum of association a contract was made by the directors with Messrs. Stott and Sons that they should be the architects for the building of two spinning mills, and, circumstances having prevented this and the company having prevented the appellants from earning their fees, the company were liable in damages to the architects. The County Court Judge held that there was no valid contract to pay Messrs. Stott five per cent. on the total cost of the mills in question. He accordingly rejected the proof of £8,475, and ordered the appellants to pay the costs. In the case of Mr. A. H. Stott's claim, the County Court Judge held that the money should not have been

paid to Messrs. Stott and Sons, and he held that the money paid should be set off against the £250 awarded the firm. The case was appealed to a Divisional Court, and there Justices Ridley and Bray supported the findings and judgment of the County Court.

Mr. Martelli argued the case at great length, contending that the Courts below were wrong.

Without calling on the respondents, the Lord Chief Justice said the appeal must be dismissed, as in his opinion the judgments in the Courts below were correct. It was quite impossible to say that a valid contract was made when a company appointed a firm of architects for building certain proposed buildings, and that by a resolution to appoint architects they rendered themselves liable to damages if they did not build. There was no contract, but an ordinary arrangement that certain persons should be architects to the company and should do certain work on specified terms. On the other ground, as to the money lent, he agreed with the opinion of the judges below.

Lord Justice Farwell and Sir Samuel Evans concurred, and the appeal was accordingly dismissed with costs.

THE NEW PRESIDENT OF THE A.A.

The Architectural Association rarely, if ever, fails in the selection of the right man as its president, and it is to be congratulated on the continued succession of able men to choose from. This year the choice is made of Mr. Curtis Green, whose name is well known to the profession, and his election will, no doubt, be very popular. Mr. Green possesses characteristics which should make him an admirable president, and his sincere enthusiasm for his art, coupled with considerable ability to express it, both as a draughtsman and as a writer, should assist in developing the influence and usefulness of the Association over whose destinies he will preside. In expressing our congratulations we believe we shall be voicing the unanimous feelings of the profession.

THE NEW A.R.A.

We have much pleasure in announcing that Mr. E. L. Lutyens was elected an Associate of the Royal Academy at a meeting of that body held recently. It is superfluous to say what all architects know: that in this case there can be no doubt that the Academy has done honour to one to whom honour is due, and has shown its appreciation for, and knowledge of, the art of which Mr. Lutyens is one of the most brilliant exponents.

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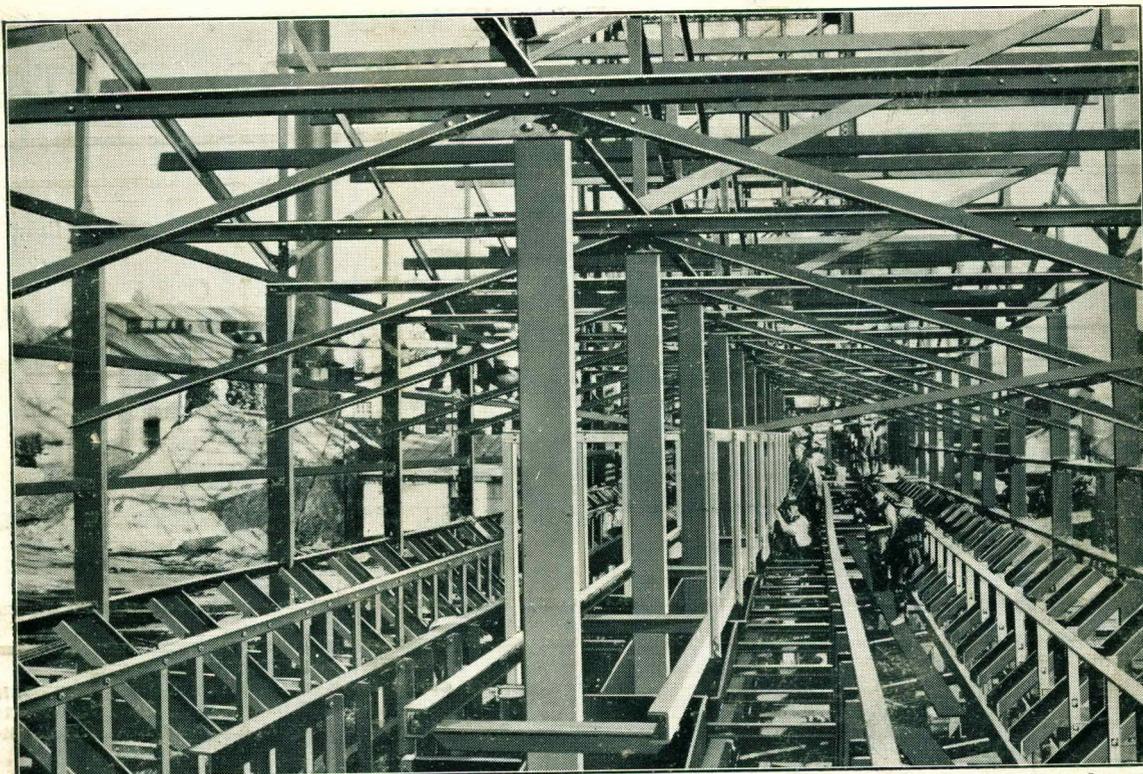
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