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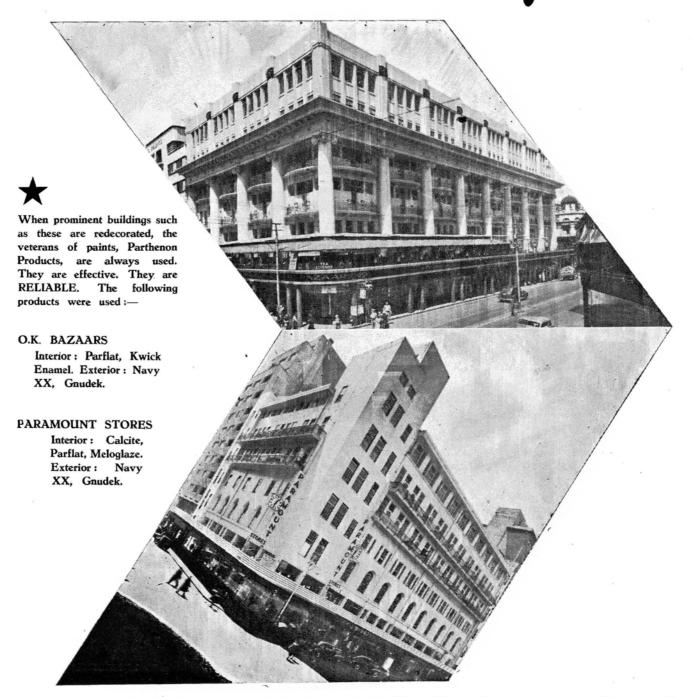
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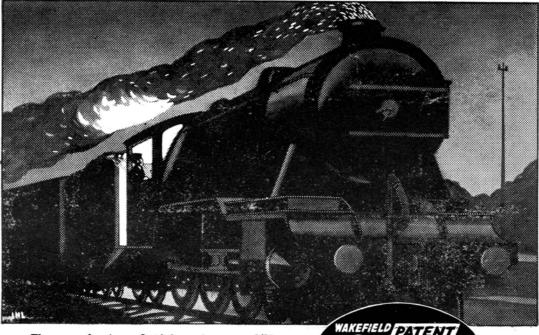
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LOOK DOWN ON BLACKED-OUT ENGLAND. An orange glow flares out below.

The fireman of a northbound goods train stokes his furnace--quickly shuts the fire-door. The glow is gone--"The Hun might spot us, an' lay 'is eggs on us"! It's a far cry from the slow-moving "goods" in the black night below to the hurtling passenger express, which, in 1935 achieved the remarkable speed of 108 M.P.H. on a scheduled run. Then, 400 tons of thundering steel--kept in effortless motion by the paper-thin film or a

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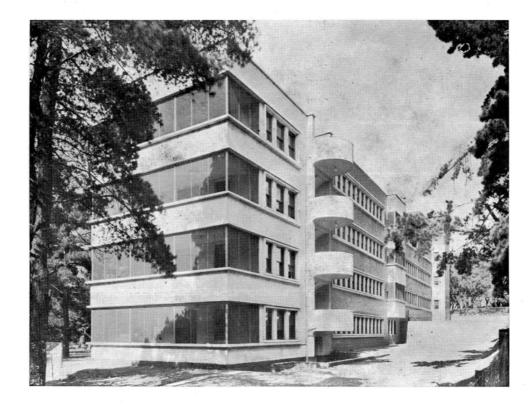


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New Ward Block



Illustrated above is the new Ward Block to the Transvaal Memorial Hospital for Children, Milner Park, Johannesburg. The Block is of reinforced concrete construction, faced externally in brick with plaster dressings. Concrete construction is of the "truscon" type, giving flat ceilings throughout. Note the glass-enclosed balconies on the west elevation. This Block is connected to the existing building by a corridor on the ground floor only. Separate vertical transport is provided.

New Ward Block

THE TRANSVAAL MEMORIAL HOSPITAL FOR CHILDREN A Modern Design Embodying

Ŵ.

A Modern Design Embodying The Latest Principle Of Isolating Young Patients Into Small Ward Groups:::

A N interesting design for a new ward block for young children is provided by the recently erected four-storey extension to the Transvaal Memorial Hospital for Children at Milner Park, Johannesburg. This new block is designed to accommodate medical cases exclusively, the architects being Messrs. Gordon Leith and Partners.

The planning of the new ward block embodies the modern principle of isolating young children into small groups to avoid cross-infection by air-borne diseases such as chicken pox, diphtheria and scarlet fever. Allied to this principle is the modern system of facilitating supervision by having glazed partition walls between all wards and between the wards and corridors. This glazing is carried out from a height of 2 ft. 6 in. above floor level to the ceiling.

The principle of isolation adopted has resulted in the following ward arrangement:—

The lower ground floor and the upper ground floor are for children over six years of age. On the lower ground floor there are three single-bed wards, one 6-bed ward and one 4-bed ward. This floor also provides accommodation for mothers who have to spend the night at the hospital in cases where their children are seriously ill. Two bedrooms are provided for this purpose.

The upper ground floor contains one 6-bed ward, two 4-bed wards, two 2-bed wards and four single-bed wards. In addition there is a dining room for semiconvalescent children.

The first and second floors are for children under six years of age. Each of these two upper floors is provided with one 6-bed ward, two 4-bed wards, two 2-bed wards and two air-conditioned wards for prematurely born babies who are treated here under special conditions of temperature and air humidity.

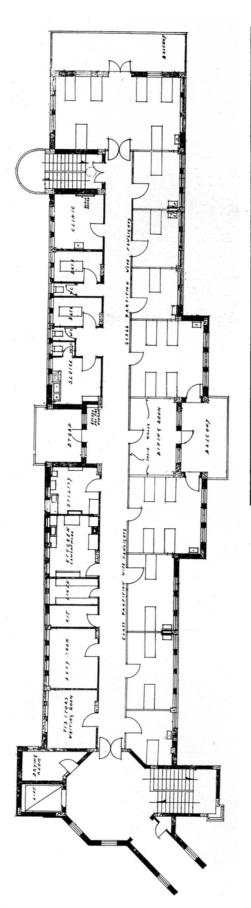
Service units comprise a duty room, a sluice room, a utility room, a clinic room, bathrooms and w.c.'s on each floor. The two lower floors each have an ordinary ward kitchen and the two upper floors have each a special milk kitchen. A stoep is provided on all floors on the south elevation for general purposes as well as the handling of soiled linen. On the flat roof there is a sun porch for children requiring sun treatment.

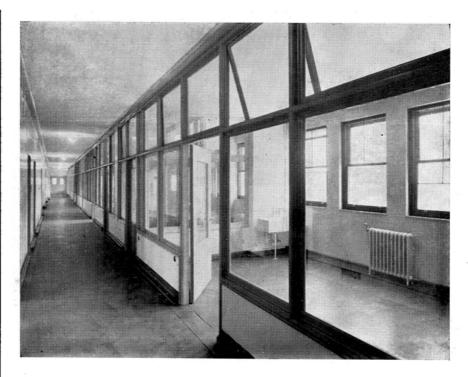
In each ward on the two upper floors a special baby's bath has been provided for use in cases where infants may not be moved out of the ward. These are in addition to the usual bathrooms. The usual sterilisers have been provided, these being supplied with steam from the main boiler house. The building is heated throughout with hot water radiators.

The new ward block is of reinforced concrete construction and is faced externally in brick with plaster dressings. The concrete construction is of the "truscon" type giving flat ceilings throughout. All corridors, kitchens and sluice rooms are sound-proofed with asbestos-sprayed ceilings. Wood-block floors have been laid in the wards, but in the corridors and duty rooms the floors are covered with linoleum. Cement tile flooring has been used in the service rooms.

The glazed partition walls to the wards have been mentioned above. All the service rooms are partitioned with brick walling and are located on the south side of the corridor. The wards face north, their windows being unobstructed by balconies. Balconies, however, have been provided on the west elevation for such patients as may benefit by their use.

The new ward block is connected to the existing building by a corridor on the ground floor only. It has its own separate lift for access to the upper floors.





A view of one of the two upper floors in the new Ward Block is shown above. The two upper floors are for children under six years of age. Partition walls to the wards are glazed from 2 ft. 6 in. above floor level. All wards have wood-block flooring, the floors in the corridors and duty rooms being covered with linoleum. Service rooms have cement tile flooring. The ceilings in the corridors, kitchens and sluice rooms are sprayed with asbestos for acoustic purposes.

(Left) Ground Floor Plan

New Concrete Road Bridge Over

The Komati River



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THE new Komati River Bridge, illustrated above, is on the main road to Lourenco Marques, and is situated about one mile from the Komatipoort Railway Station. It has proved a boon to motorists who before were obliged to use a drift at this point. Construction began in April, 1940, and by the end of that year the 17 spans, each 60 feet long, were virtually completed.

The structure, which is entirely in concrete, provides a roadway 20 ft. wide with a footpath on each side. It cost approximately £25,000; and was erected to the design of the Union Public Works Department, building operations being under Departmental supervision.

Progressive Air Architecture

SOLOMON, the wise, was of opinion that three things were impenetrable mysteries: The way of the eagle in the air, the way of a ship upon the sea and Life.

It was a far cry from Noah's Ark to the "Great Eastern" and perchance a still farther cry from the "Great Eastern" to the "Queen Mary" or the "Normandie," but we may surely claim that the mysterious way of the ship upon the sea is now a path well trodden by the naval architects.

Similarly, it was a far cry from Icarus, the first airman of fable, who, under the influence of Daedalus, the architect, essayed flight by waxing wings to his shoulders and fell because the wax melted in the sun, to the brothers Wright who within living memory showed that heavier-than-air flight was practicable.

Many fell to earth between the time of Icarus and that of the Wrights and many still continue to fall; but the progress in our times passes from the marvellous almost into the miraculous.

It is hardly too much to say that we are solving the problem of levitation just as surely as Newton solved that of gravitation. Surely, we are almost in sight of the fulfilment of the imaginative philosopher's dream of a time when man will be able to establish a parity of the forces of gravitation and levitation. There are, indeed, some who believe that man once had that power and that only so can we account for the movement of such enormous masses as those of the Trilithon in the Temple of the Sun at Baalbec.

The secret behind that movement is hidden from the mechanical philosophers of our day, but it is not too much to say that the magical faith that moves mountains inheres in the mechanical progress of our age and that our greatest progress along these lines appears to lie in the realm of the air.

The seven wonders of the world were once composed of the static architecture of such monuments as the Pyramids of Egypt, the hanging gardens of Babylon, the Church of the Holy Wisdom at Constantinople, and the like, and these may never be surpassed, but there are wonders still to come, on and under the sea and in the air, that should kindle the imaginative, experimental, designing and constructive enterprise of the engineers and architects of to-day.

Here, these professions are on common ground and only by intimate and friendly collaboration can they hope to achieve the maximum of that adventurous progress for which all truly creative intelligences have an impulse.

The pleasing and efficient lines of naval architecture are the counterparts of the efficiencies of the vessel's engines. That state of affairs must be paralleled in the air, for grace and efficiency have always marched hand in hand. Signs are not wanting that this gracious co-operation is steadily gaining ground and that the mobile marvels of tomorrow will result from a marriage of the mechanically efficient with gracile form. One sees this particularly in the latest efforts of the Air Ministry which are directed by technical designers of great architectural and engineering skill, working in harmony with chemists and physicists.

The evolution is rapid.

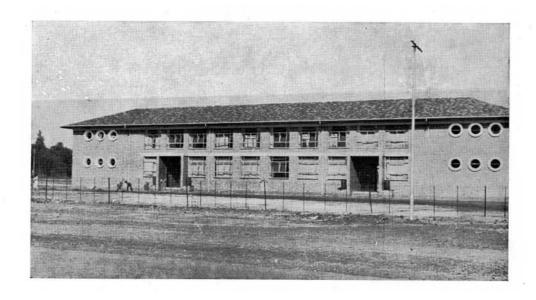
The fusilage of a modern air machine illustrates this. Once, it was of heavy metal, then a lighter and stronger metal, then of hemlock, then of Balsa wood and lastly, of phenoidal gum that gives the essence of the wood's strength, lightness and pliability, and is so easily manipulable that the body of quite a big machine can be cast in two pieces, magnificently streamlined and wholly fabricated in the course of a single working day. Tomorrow, argosies of such and suchlike construction will shower down our bales of merchandise and take us to and from our work and homes.

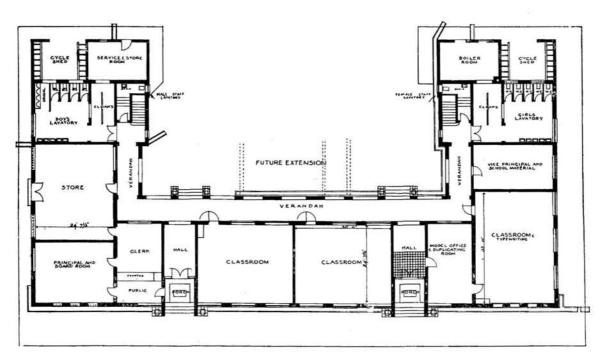
How many architects are there that live by the light of these uplifting marvels of progress? Many have not experienced the breath-taking sensation of flight. In the empyrean there are new worlds to conquer; new sensations to experience. From it one sees afresh the beauty of colour intensified and analysed, the marvels of hitherto unsuspected depths of Chiaroscuro. Monarchs of all we survey; we analyse Nature's slump tests of materials on hill and vale, the range of materials with which she works; the almost automatic but certainly Divine beauty of her creations in harmony and contrast, form and texture.

From the contemplation of such things we shall emerge in some small way — godlike — to create, for "man is likest God when he creates." These things pertain to the miraculous beauty of the everyday things that surround us and they are nowhere to be found more easily than in the study of the progressive air architecture of our day. The marvels of our youthful readings in Jules Verne have become commonplace. The castles in Spain of which we dreamed have taken form and substance before our eyes. Are we mad in that we can still complain of ennui? Are we so sated that we have become blasé, or are we so avid of new sensations that we are bankrupt of morals and of hope?

It is seriously pleaded that in a study of the aerial way lies the hope of our future and that of the world. Daedalus and Icarus may have failed to keep a-wing and maintain a place in the sun, but where they failed we may succeed.

Potchefstroom Commercial High School





GROUND FLOOR PLAN.

New Tuition Block for Potchefstroom Commercial High School

Completion of First Stage of Two-Fold Scheme



HE contract for the Potchefstroom Commercial High School was signed on January 27th last. A contract period of nine months was allowed for the undertaking, the building being due for completion by the end of September. The cost of erection will be approximately £15,000.

Only the first portion of the scheme has been carried out. This comprises the Tuition Block. An Assembly Hall unit will probably be erected in the near future. The new school has quite a considerable site bounded on either side by Kolbe and Mooi Streets. The Tuition Block faces Auret Street.

The general appearance of the new building is fresh and attractive. Its elevations are carried out in golden-brown brick with dark burnt purple facings to the doorways and the plinth. White cornice moulds have been placed over the ground and first-floor windows, and the roof is covered with multi-coloured slate to complete the harmony.

The windows are on the large side, and are fitted with single-pane casements to ensure the maximum of light and air to the 12 class-rooms. Circular windows have been used to give light over the blackboards. These are set in the large mass of plain walling at each end of the front elevation, an arrangement which lends an appearance of strength and restfulness to the building.

TURNER NEWHAM.

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Is There a "Modern" Architecture?

By

W. J. Delbridge

THE answer to the question which serves as a title to this article would appear to depend on what we mean by "modern" and by "architecture." Perhaps, if we get down to basic definitions, each such definition may be able to supply an answer agreeable to the individual outlook on Life and Art.

Taking "architecture" first, we may be excused for accepting the definition that it is something compacted of "firmness and delight" or, in other words, sound construction touched by imagination. Building alone it cannot be, for that is but firmness. Perhaps like W. H. Leeds, the polemical opponent of Ruskin in the Battle of the Styles, we might all agree that beautiful texture, or "Kalotecture" would be a preferable term to Architecture because the latter term is, in our time, open to minconception.

Fine building is, by custom, left to the architect: his title means literally chief workman. But he has ceased to be chief workman, just as the poet of our day wears his title, not because he is a "maker of things," which is what the word "poet" originally signified, but because he is the creator of images, the weaver of dream patterns that kindle our emotions.

Nor is it necessary to postulate, as some do, that the architect is a modern invention — that bars the way to fine building — any more than it is true that Phidias Ictinus and Callicrates were the sole creators of the Parthenon by reason of their personal manual labours. The very idea is absurd.

That the architect of today would be better if he were a fine craftsman as well, appears self-evident; but, if he be a scholar with such a knowledge of the

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fine craftsmanship of the past that he can create structures in the embodiment of which he can inspire the excellent among the artisans of our age to become craftsmen, he will attain results as fine as those achieved by his forebears, as racy of the soil on which he works and fully significant of the spirit of our times.

Let the City of Liverpool bear witness! It had few and trivial, if any, inheritances from Gothic or Renaissance times. But a full generation ago the young architect Elmes created the very beautiful civic Neo-Classic St. George's Hall, and in our own time Gilbert Scott is creating the wonderful new Protestant Gothic Cathedral on St. James' Mount. Luytens, if he is spared, will provide a Roman Catholic Free Renaissance fane of grandeur at a lower level.

The labels "Neo-Classic," "Gothic," and "Renaissance" or "Civic," "Protestant" and "Roman" are but the outward wrappings of the inward facts of fineness that these buildings stand for.

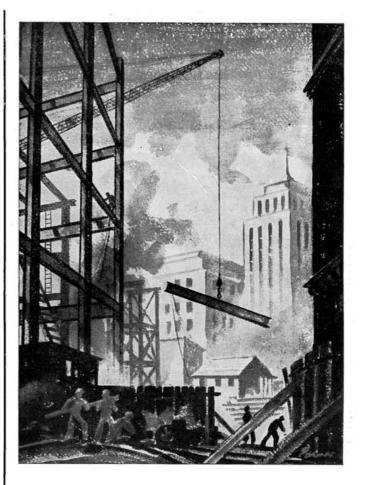
The label "modern" is also misleading. The local press reminded us recently that there is in the British Museum "a Babylonian tablet of about 3,000 B.C." which bears the inscription "Alas, alas, alas; this modern world is very wicked." The thought behind this lament is similar to that behind our own belief that the boys now in the classes we used to attend are smaller than those in our school days. Neither idea is supported by facts any more than the idea of our would-be ultra-modern constructivists, who tell us that our generation must have an architecture of which the hall-marks are metal, glass and concrete.

The Church of the Holy Wisdom at Constantinople has domes and the Baths of Caracalla had vaults of a concrete finer than any we can produce today; and the forms were treated with a skill that we do not now exhibit.

Paxton, the market gardener, produced in the Crystal Palace at Sydenham a creation in glass and metal that was about the last word in such matters. The modern method of using concrete is the very negation of "craftsmanship," the manner in which we use our glass the enemy of the æsthetic. If, by their proper use, we can redeem these two materials from present vicious tendencies, we may, from the architectural strivings of our day, pass on a heritage of firmness and delight that will be worth while.

In order to do this let us, in our glass, get such beauty as lies in the "riance" of the old ambetti, the glamorous flashing of pot metal, the textural charm of bullion or the translucency of Powell. In our concrete, textural value similar to that of the veritable "opus mosaicus" might be aimed at. We might do worse than seek that beauty in metal which was discovered long ago by Sardanaphles Cellini and Quentin Matsys and eagerly pursued by Bambridge Reynolds in our own times.

Are we sufficient for such things?



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