The dramatic and unexpected announcement by the Chancellor, Dr. Saw to the Senate in March 1926, that the Senate would "benefit considerably" from the Hackett Estate, was received with deep satisfaction by all concerned. It brought to an abrupt conclusion the long drawn out "Battle of the Sites" with which the Senate was very weary, for here was money with which to erect worthy permanent buildings. To the University Staff it brought in view the termination of the 15 years sojourn in the cramped and ugly quarters in Irwin Street.

Many building proposals were discussed and the Vice-Chancellor, Professor Whitfield talked of "investing monies in building one or two model streets" etc. and stated that "If we could obtain a suitable man to design properly the expenditure of £250,000 it might pay the University to appoint him Professor of Architecture. In Sydney the Professor of Architecture is the Architect for University Buildings.

In September 1926 it was decided to secure the services of Professor Wilkinson, Architecture of Sydney University to draft conditions. He agreed to come to Perth as soon as possible after Lectures ceased. A special meeting of the Senate to meet Wilkinson and discuss his proposals with him was held (29/11/26) Apart from the details afterwards set out in the terms of the Architectural Competition he said two things which to me were noteworthy -

1. He found the Desbrow Annear layout plan "not altogether satisfactory".

2. I quote "To maintain and give seclusion the whole grounds should be inclosed with a low wall of Cottesloe stone."

This last remarkable idea led to a brush between him and me which I have mentioned elsewhere.

With regard to the first the Annear plan arranged the various Department over all the available ground. Wilkinson's ideas favoured the direct opposite
plan they favoured the concentration of all the University Buildings on three sides of a Grand Court, the Central feature being the Library facing Matilda Bay.

He agreed to act as consulting Architect and Assessor for the Design Competition and to draft the conditions. He was also asked if he could act as "Consulting Architect" with reference to other future Buildings, and at the next meeting (December 1926) he was appointed Consulting Architect for the Physics and Engineering Building for 1927 at a fee of ½% on the cost. Whether he did any work in connection with this last project I do not know, but when the Physics and Chemistry Buildings came to be erected in 1934 and 1935 the Government insisted on their own Architect. The Buildings were erected with Hackett bequest monies advanced to the Government for that purpose, the Government to repay Hackett Bequest over a period of 30 years with interest at 5%. So the Government were providing the money and as I have said insisted upon their own Architect. This shut Professor Wilkinson off and caused him to lose his substantial fee of about £300. This naturally caused some acerbity to appear in his final communications to the Senate. It is also a probable cause of Whitfield's sense of grievance over the plans and construction a probable factor in the unhappy squabble it is also between Wilsmore and Ross and Whitfield and the Contractor and the Architect, over the Physics and Chemistry Buildings when it came to be constructed.

It may be of interest to some one to set out briefly the various decisions, statements and remarks which contributed to the muddle over the employment as Architects doing work for the Physics and Chemistry Building of Wilkinson, Altep and the Government architect.

There is no record to show what if anything was paid to Professor Wilkinson for his services as Adjudicator and for drafting the Architectural competition.

In November 1927 he forwarded his improved layout of the grounds with possible extension to buildings
sketched.

In December 1927 Whitfeld reported to the Senate that Wilkinson had replied to some invitation to become liaison adviser (issued on the sole responsibility of Whitfeld) -

"Your suggestion, for a retainer of £100 per annum for two years and £75 for the model (of the Buildings) and expenses for 2 or 3 visits to Perth, is quite acceptable to me. This would be for all advice and assistance as matters crop up and for the general lay out of the plan which I have prepared and which I think is of value."

In accordance with Whitfeld's method the foregoing which is merely a paragraph in the Vice-Chancellor's report, would be read at the Senate meeting, no motion authorising the expenditure would be carried, but if no one objected to the proposal, Whitfeld would take the proposal as endorsed and would then write letters which neither the Senate nor any committee ever saw, to Wilkinson which he would naturally take as official and fully authorised. A resolution which

(1) cannot be fixed definitely appointed Wilkinson Consultant Architect, for future buildings.

December 1930 "On recommendation of Vice Chancellor, Rodney Alsop appointed Architect for Science Buildings" this was 2 years after definite letter from the Under Secretary, MENT P.W.D. that the Governor would insist on their own Architect doing the work.

Then when Alsop became the big figure with Whitfeld, the position of Wilkinson as Consultant Architect was declared by Alsop to the Senate (March 1928) to be unnecessary, "no consultant was necessary".

The conditions of the Architectural Competition were issued in December 1926. The features which are now of any interest were as follows:

The opening paragraph reads -

"This Competition is being conducted at the expressed wish of the late Sir John Winthrop Hackett, first Chancellor of the University of Western Australia, who by his munificent bequest has laid upon the Senate the responsibility of erecting a University Centre which shall embody the testator's ideal as to the importance of fine
Buildings in the education and refinement of the Citizens of a State. It is the Building to be known as the Winthrop Hall especially that the ideal should be realised. There is an opportunity for an artist to express his thought freely unhindered by the influence of discordant surroundings. There are to be no definite limitations of materials or style. All is to be left to the unfettered discretion of the designer. He is asked to record his conception of an ideal type of building for a University group to be erected by a British community in a climate and setting which may perhaps be best described as Mediterranean. It is intended that the winning design shall set the type for all future buildings which may be erected on the site.

This competition is open to Architects who are British subjects or citizens of the United States of America.

The Atmosphere is generally clear and brilliant sunshine is usual except during the winter months. Such a climate encourages an open air life, and covered walks connecting the various buildings would afford appropriate shelter from the sun in midsummer and the winter in midwinter.

The total sum available for the buildings, which form the subject of this competition is £150,000. Three premiums will be awarded. For the design placed first £300. For the design placed second £200. For the design placed third £100.

The three premiated designs shall at its option become the property of the Senate and the author of the prize design to become the Architect of the Buildings.

A great Hall to be known as Winthrop Hall for conferring of Degrees and other official University Ceremonies and Functions.

The Hall is to be capable of seating 1000 persons not including any in a gallery. There should be provision for an organ, the cost of this however is not to be considered in the competition."

A very fine response of 52 designs was received. A large proportion were of high quality, and some of very poor quality. One was promptly dubbed by Professor Wilsmore "the Two Pubs" and the name was apt for it might readily be taken as a design for two adjoining two-storied hotels such as are common in country towns on street corners.

The adjudicators, Dr. Saw, the Chancellor representing the Senate and the two architects, Professor L. Wilkinson of Sydney and Mr. A. F. L. Wright of Perth, were unanimous in their finding which placed first the design by Rodney H. Alsop and Conrad Sayce of Trinity House, Little Collin Street, Melbourne.
Second Premium went to Donald H. McMorran, Harrow on Hill, England.

Third went to Gummer and Ford, Auckland, New Zealand.

Fourth, Summerhayes and Son, Perth.

Other designs came from Capetown, New York, N.S.W. and California.

The adjudicators were emphatic as to the outstanding merit of the winning design.

"In our opinion design No. 141 is outstanding in its excellence. The author of this design exhibits a remarkably keen appreciation of the problem and his conception when carried out should result in the creation of a group of buildings admirable in every way."

There were in effect two first prize designs. The adjudicators say "In deciding upon the awards a slight difficulty has arisen owing to the fact that two designs, viz. Nos. 141 and 137 are in all essential points the same. This similarity is so pronounced that we feel justified in considering them as one design with an alternative."

The two designs were in fact the work of two partners in the firm of Alsop and Sayce. The two men before the Building was completed had an unfortunate quarrel as to the share which each had in the design. Sayce began an action in the Supreme Court of Victoria. The rights and wrongs of the matter were not told to the Senate.

Alsop wired 25 November 1929 -

"Sayce applied for settlement offering to relinquish all rights and interest in my favour. Satisfactory settlement out of Court."

But subsequently Sayce made an appeal to the Senate and the Chancellor Saw was authorised to see him and see what he could do to settle the quarrel and give justice to Sayce.

I have examined all the correspondence and other documents relating to this unfortunate quarrel. As there is small probability of anyone again doing so, it may be of value to set down the impressions left on my mind by the perusal.

Alsop undoubtedly shows up best. He seems to have done whatever he could to satisfy Sayce and after Legal
process had been begun by Sayce he (Alsop) offered and made payment on such a liberal scale to Sayce for his work that the action was withdrawn.

Sayce seems to have been a temperamental sort of person who appears to have suffered from some sort of persecution complex which led him when he got at issue with anyone to hint and suggest and even make outright charges of corrupt practice. For instance against the probity of the Victorian Institute of Architects who failed his thesis for recognition by them of him as a registered architect. These the Chairman of course hotly resented.

Against this and much more of the same kind there is the undoubted fact that the adjudicators on the Hackett Buildings Design Competition placed the design by Sayce first. They bracketed No. 141 (Sayce) with 137 (Alsop) but say "In our opinion Design No. 141 is outstanding in its excellence". It might also be mentioned that Sayce by his own report had had some success in Literature, Music and Painting, before he came to Australia.

The trouble between him and Alsop began when the Senate although agreeing with the adjudicators' verdict as to the excellence of 141 design, did not like the appearance of the Tower and Alsop without consulting Sayce redesigned the Tower. This Sayce resented bitterly and instead of protesting in a dignified way he asserted that Alsop's tower would not fit the various floor levels etc. Alsop replied to this. The more the correspondence grew the greater became the number he (Sayce) had antagonised.

Having secured an acceptable design the next thing was to proceed with the erection.

When at the Senate meeting the adjudicators were describing the winning design they quoted from the designer's specification that the Buildings were to be of brick with "cement finish". I asked the question "is that what is usually described as Brick and Stucco?" The answer, yes, was
immediately followed by an emphatic remark by Archbishop Riley "then they would not have got first prize from me."

I followed this up with the final result that what Sir Walter James frequently called "Somerville Stone" was used instead of Brick and Stucco. The change added £5000 (from memory) to the cost and there is no doubt the money was well spent. Furthermore the use of Coogee Somerville Stone led to the investigation into its Chemical and Physical properties. This in turn led to its use, with the approval of Mr. Bagenal the English expert in Acoustics, in the interior facing of the Walls of Hadley Hall. This was in place of the expensive English acoustic tiles which Bagenal had recommended.

A short time after the decision was taken to use Cottesloe stone I had a holiday in Java and there saw what the Dutch had done with Brick and Stucco and pure white finish in that beautiful building the Bank of Java in Bandong. If I had seen this and other very fine Public Buildings in Java I might not have been so definite in my disapproval of Brick and Stucco.

There was considerable opposition to the use of Cottesloe stone due to the examples of it disintegrating, in places exposed to the weather, in old buildings in Fremantle. The members of the Senate accompanied by Professors Wilsmore and Clarke visited the old Asylum built of local stone and the Sea wall at the back of the old Custom House in Fremantle which is made of Rottnest Stone and other buildings, (August, 1929). It was seen that the fmitting or disintegrating was only in small patches but was of course nevertheless a serious fault. Chemical and other tests were made and it was found that the quality as a building stone depended upon the proportion of carbonate of lime it contained, 80% or more being desirable. Samples from various quarries in Perth to Fremantle district were examined and that situated just off the Fremantle, Rockingham road and about midway between
the two towns was selected. To secure a uniform quality and provide for future needs this quarry was finally bought for £270.

For those interested see pages 159-161 of Vice-Chancellor's report for October 1929 for a long technical report of samples from various quarries by R. W. Fletcher, Hackett research scholar. That from the quarry purchased is shown to contain -

Moisture 1.0%, Ca CO₃ 82.8%, Insoluble 15%,

Porosity (air space as P.C. of total Vol of dry stone) 5.3.

Porosity (% water absorbed) 40%, Density (grams per C.C. of dry matter) 1.32.

In February 1928, Whitfeld submitted a statement presumably prepared by Alsop as to the probable cost of Hackett Buildings, this was

| Hackett Buildings | £167,000 |
| Furniture         | 5,000    |
| Wall              | 2,000    |
| Roads             | 1,000    |
| **Total**         | **£175,000** |

The surplus from the Hackett fund A (interest on £150,000) for the years 1927 - 1930 which could be used as a contribution towards the Building fund would amount to £15,000 making a total building fund of £165,000 to meet an estimate of £175,000. So as the first reduction, the Senate decided to eliminate the second story of the Students' Building and to call for alternative tenders for Cottesloe Stone or Brick and Stucco.

At this meeting I suggested provision in the Tower for a future Carillon of Bells and was assured by Alsop that it was ample strong enough for that purpose.

"Extract from Vice-Chancellor's Report to the Senate, October, 1935.

COST OF A CARILLON OF BELLS IN THE UNIVERSITY TOWER.

Mr. Houssman, of the firm of Gillett & Johnston, British bell makers, passed through Perth recently. He asked permission to inspect the University tower and to give an approximate estimate of the cost of installing a carillon of bells. He stated that the tower is absolutely
right, and that the site is admirably suitable owing to
the quiet surroundings and the number of grass lawns, trees,
etc. He would recommend a carillon of 23 bells (two octaves,
i.e. the range of the human voice). Another octave could
be added later if desired. No alteration would be re-
quired in the Belfry. The bells just visible opposite
the openings. The cost of a carillon of 23 bells would be
roughly £3,000 Australian, but a beginning could be made
with 12 bells with the framework to hold 23 bells. The
cost of this would be £1,000, and 12 bells would play 30
well known tunes. He did not recommend automatic playing
mechanism or key-board. The normal method, and the cheapest
is a hand mechanism operated in the tower, as this is more deli-
cate. Bells are admitted duty-free if tuned and above 5 in
number.

The Sydney University carillon has four octaves,
and about 50 bells. Some American carillons have 72 bells,
but a smaller carillon of 23 bells can play most music which
is really suitable for bell playing and one avoids many
complications."

At the June 1928 meeting it was decided to
approve of Alsp's plans and to fix the closing date for
Tenders after Alsp had consulted the Building Contractors
Association. 7

A model of the Building was exhibited and tenders
opened on 30/7/28. The tenders came as a great surprise
to the Senate and to the architect. Eleven tenders for
construction in stone and eleven for Brick. Some of the
figures are as follows -

<table>
<thead>
<tr>
<th></th>
<th>In Stone</th>
<th>Synthetic Stone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawkins &amp; Son</td>
<td>£228,828</td>
<td></td>
</tr>
<tr>
<td>Donald</td>
<td>230,725</td>
<td>205,130</td>
</tr>
<tr>
<td>Brine and Son</td>
<td>232,868</td>
<td>196,638</td>
</tr>
<tr>
<td>D. J. Atkins (highest)</td>
<td>290,000</td>
<td>215,000</td>
</tr>
</tbody>
</table>

As there was only £165,000 in hand something drastic had to
be done. The chief reason why the tenders for stone were
so high was that the search for an acceptable Lime Stone was
not completed and the stone tendered for was Donnybrook stone.

The Senate decided that no tender be accepted and
the Architect was instructed to negotiate to see if lower
tenders could be obtained while adhering to the lines of
Hawkins & Sons tender.

Alsp attended the August meeting and submitted
an amended tender from Hawkins and Son of £195,913 made up

<table>
<thead>
<tr>
<th>Building</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Building</td>
<td>£45,782</td>
</tr>
<tr>
<td>Guild Building</td>
<td>38,229</td>
</tr>
<tr>
<td>Winthrop Hall</td>
<td>111,901</td>
</tr>
<tr>
<td>Total</td>
<td>£195,912</td>
</tr>
</tbody>
</table>
This was still at least £30,000 beyond the money available it could not be accepted and the Architect was directed to negotiate with Brine and Son.

Finally on 28th August 1928 an amended Tender from Brine and Son was accepted and a contract signed in October for £181,179.

Extract from SPECIAL MEETING of the SENATE held on 28th AUGUST, 1928.

TENDERS for HACKETT MEMORIAL BUILDINGS.

A report was received from the Architects, Messrs. Alsop and Gye, forwarding an amended tender from Messrs. Brine and Sons for the Hackett Memorial Buildings, amounting to £181,179 divided up as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Arts and Administration Building</td>
<td>41,025</td>
</tr>
<tr>
<td>(2) Hackett Hall and Guild Building</td>
<td>36,173</td>
</tr>
<tr>
<td>(3) Winthrop Hall</td>
<td>103,981</td>
</tr>
</tbody>
</table>

£181,179

The Architects reported, that Messrs. Brine and Sons were prepared to carry out the work for the above amount as (a) a straight out contract or (b) on a cost and commission basis, under which the cost together with their commission would not exceed the amount of the amended tender, viz. £181,179, but the estimated cost was £169,689.

After discussion it was decided:

That the amended tender of Messrs. Brine and Sons be accepted on a cost and commission basis under the following conditions, subject to the Government providing a sum sufficient to complete the buildings:

CONDITIONS of TENDER.

(1) That the cost together with their commission will not exceed the amount of their amended tender - that is, £181,179.

(2) That subject to No. 1 their commission to be 5% on actual cost.

(3) That this payment includes use of all plant.

(4) That the University gets the benefit of all discounts and indent savings.

(5) That a competent clerk be retained on job by University.

(6) That weekly progress reports be made of financial position.

Mr. Brine's estimate for the work carried out under these conditions is £169,689 and is made up as follows:
Net cost of labour and materials £160,657
5% commission 8,032
Clerical expenses 1,000

£169,689

The following table shows this more fully:--

Original Tender £232,868

Arts & Administration )
Hackett Hall ) Savings £183,890
Winthrop Hall ) £194,479

Less 10% builders profit £18447 £166032

Less 1½% on goods indented 2075 £163957

Less Part No, 1 Bill of Quan. 3300 £160657

Add 5% Commission 8032
Add £1000 office expenses 1000 £169,689

It was further decided:--

(1) That the Chancellor, together with the Vice-Chancellor should wait upon the Premier in regard to the matter.
   It was suggested that the amount paid as a Liquidation Tax on the Hackett Estate, viz, £28,380/10/-, might be allocated by the Government towards the buildings.

(2) That the Chancellor and the University Solicitors should be consulted in regard to the wording of the Contract with Messrs. Brine and Sons.

(3) That Lady Hackett and relatives of the late Sir, Winthrop Hackett should be invited to attend the laying of the foundation stone of the buildings.

(4) That the basis of the accepted tender, viz, cost and commission should be kept confidential.

These extracts indicate two possibilities either the Senate of the time was a rather gullible body or that a number of the more influential members were in possession of information not known to the majority. Consider the last paragraph of the extract, that the cost and commission basis of the amended tender was to be kept confidential, one may ask why was this necessary? Consider also the first paragraph, Brine and Sons were prepared to carry out the job on a straight out contract for £181,179 or on a cost and commission basis which they promised
would cost £169,689. The difference between these two sums £11,490 would have been estimated profit which Brine and Sons were willing to forego. Again one may ask why? The most probable explanation is that some members of the Senate were in possession of information as to the financial strength of Brine and Sons and were fearful that if the job were taken as a straight out contract the insolvency of the Contractor would have left an unfinished building. This is not a very satisfactory explanation, but whatever was the true reason the decision to change from Contract to Cost plus commission was disastrous and the whole subsequent muddle created by repeatedly revised estimates as to the cost and the money necessary to finish the building show that Alsop, talented artist as he was, was yet very weak on the financial side of his Art. But worse was to follow. In December 1928 when the Contract was only four months old and when very little actual building had been done the Senate in response to an application from Brine and Sons again varied the agreement, as the following extract from the Senate minutes will show -

Extract from Senate Minutes for 10th December, 1928.

Letter from Brine and Sons re bonus on Contract.

A letter was received from Messrs. Brine & Sons, stating that it might be possible to complete the contract for the Hackett Buildings for a smaller sum than £170,000, and asking that they should be allowed in addition to commission on the sum of £170,000 a bonus equal to one-half of the difference between £170,000 and any actual lower cost.

It was decided that a supplemental agreement be drawn up with Brine & Sons on the following conditions:-

(i) 5% commission to be allowed on the actual completed cost of construction, as set out in the Special Deed of Agreement of October, 9th, 1928.

(ii) If the actual completed cost (excluding cost of extras) together with commission thereon be less than £170,000 then a bonus be paid to Messrs. Brine & Sons equal to one-half of the difference between £170,000 and the said cost including commission.

Messrs. Brine & Sons asked for a commission of on £170,000 but under the above arrangement they will only be allowed commission on the actual cost, if it is below £170,000.
At the end of 1928 it was anticipated that the foundation stone would be laid in about April 1929. Whitfeld thought that it seemed desirable in addition to the formal statement as to laying, date, Architects name etc. some indication should be given of the wishes of the donor. Professor Murdoch was asked to write something suitable. He submitted three drafts.

**UNIVERSITY OF WESTERN AUSTRALIA**

Extracts from SENATE MINUTES for 18th MARCH 1929.

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**Foundation Stones of Hackett Buildings.**

Professor Murdoch suggested the following inscriptions for the foundation stones of the Hackett Buildings:—

**Winthrop Hall.**

Let all who use this hall do reverence to the memory of John Winthrop Hackett,
who by this and other gifts to the University of Western Australia
Sought to further the advancement of learning and the ennoblement of life.

**Alternative**

Let all who enter this hall do honour to the memory of John Winthrop Hackett
Who entrusted to the University of Western Australia
the task of so using the wealth he left behind him as best to serve the advancement of learning and the ennoblement of life.

**THIS HACKETT HALL.**

Is named in honour of Sir Winthrop Hackett,
who, being a lover of learning and a seeker after wisdom, desired that after his death his wealth might help succeeding generations to pursue wisdom and learning, and to strive for a lofty conduct of life.

It was decided to refer the matter to the Committee pointed to make arrangements for the Ceremony.

None of these was used.

The Senate decided to appoint a Committee of the Chancellor, Pro-Chancellor and Vice to draw up the inscription to go on to the Foundation Stone. (See general notes (73), Alsop on inscription.)

The foundation Stone of the Winthrop Hall was duly laid by the Premier (Collier) and of Hackett Hall (Students Building) by Lady Hackett Mouldon on April 23, 1929. 1929 was Western Australia's Centennial year.
At the end of 1929 the Architect sought the advice of an English expert as to the probable acoustic properties of Winthrop Hall. He advised bringing forward the panelling at the back of the Dais and splaying its two ends. This was done but in 1945 the famous Conductor Sir Malcolm Sargent informed the writer that he had got good results by bringing his orchestra still further forward. The most important recommendation by Mr. Hope Bagenal was the liberal use of a special acoustic tile made, for facing walls, by an English Firm. These tiles were very expensive, so at the suggestion of Professor Wilsmore who had examined the material from the Chemical angle, a sample of our Lime Stone (Cottesloe or Coogee so called) was sent to the English National Physical Laboratory to be tested for its sound absorbing properties. In December 1929 Alscop (who was in England) wired the result of this test which he had received from Bagenal -

"Coogee stone showed 22% absorption (of sound) and advising its use, in the Hall instead of the acoustic tile"

Whitfeld's comment on this was (   -

"This report is very gratifying as it means that Coogee stone possesses very valuable properties of acoustic absorption and that we shall be able to use it largely instead of expensive imported acoustic tiles. The fact that its absorption of sound is about five times that of hard plaster, should make it useful in the construction of many of our Public Buildings."

Mr. Hope Bagenal also says in one of his letters that he had never met a natural substance of such sound absorbing quality.

In December 1929 I saw the arrival on the job of the great Oregon Pine beams to be used in the ceiling of Winthrop Hall. I protested against this and was informed that it was not possible to get banks of the required length in W.A. Timbers. At my instigation the Forestry Dept. were asked if this was so. Their reply was that Karri of the necessary size and strength could readily be obtained but notwithstanding this the use of Oregon was persisted in.

In March 1930 a contract was made with Messrs Ingrams
of Melbourne for a Tower Clock and electric Master Clock for £400 and about £200 for Dials. This has never been satisfactory. The Clock has never been reliable as a time keeper and efforts to get the Contractor to make a satisfactory job have failed. Now at the time of writing (1945) some tiles have fallen out of the face of the Clock outside the Tower and owing to the complicated scaffolding necessary, repairs will be expensive.

March 1930. Whitfeld reported good progress with the Buildings. Four rooms on the ground floor of administrative block were almost complete.

This report continued -

To Contract if carried out at schedule rates 92,627.2.0
" " as carried out at cost + 5% 87,385.9.0
5,241.12.3

It will be noted that the actual cost for certain work to date together with Brine and Son's Commission is £87,385 whereas the same work if carried out at schedule rates of quantities on the contract basis of £81,179 would have cost £87,385.

Notwithstanding the congratulatory tone of this paragraph as to the saving effected by the change from straight Contract to Cost and Commission he concludes this March 1930 Report by saying that the cost of the Building may amount to £181,000 without taking in to account the Architect's Commission etc. This meant that the Building Commitments then exceeded the funds in hand by something about 12 to 15 thousand.

On 18th August, 1930 the Vice Chancellor reported inter alia a long statement as to what various persons including the Architect and the Clerk of Works and the Contractors were confident they could do given various assumptions. The most definite information to be drawn from it is as follows:
"I think that substantial savings can be made in the Winthrop Hall by cuttings on the following schedule items: some of which the Architects have already agreed to cut down or eliminate.

Estimates to Complete

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marble balcony to Tower</td>
<td>£884,10.0</td>
</tr>
<tr>
<td>Marble internal</td>
<td>£1553,7.6</td>
</tr>
<tr>
<td>Pavings etc.</td>
<td>£1773,14.0</td>
</tr>
<tr>
<td>Wall and floor tiles</td>
<td>£1074,8.0</td>
</tr>
<tr>
<td>Marble Partitions</td>
<td>£738,14.0</td>
</tr>
<tr>
<td>Lock Tiles</td>
<td>£426,15.0</td>
</tr>
<tr>
<td></td>
<td>£6411,8.6</td>
</tr>
</tbody>
</table>

I think we should be able to save about half of this amount without spoiling the Building to any appreciable extend .........I am confident that we can finish for less than £60,000 as far as Brine and Sons are concerned.

On this assumption the total costs would be roughly as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brine and Sons Payment to 1/8/30</td>
<td>£126,641 - A</td>
</tr>
<tr>
<td>&quot; &quot; &quot; Payment to finish</td>
<td>60,000 - B</td>
</tr>
<tr>
<td>Architects Fees</td>
<td>11,200 - C</td>
</tr>
<tr>
<td>Steel Shelving</td>
<td>2,750 - D</td>
</tr>
<tr>
<td>Kitchen Equipment</td>
<td>466 - E</td>
</tr>
<tr>
<td>Water Supply</td>
<td>308 - F</td>
</tr>
<tr>
<td>Eagemal report fee</td>
<td>50 - G</td>
</tr>
<tr>
<td>Clerk of Works and Building Clerk</td>
<td>3,000 - H</td>
</tr>
<tr>
<td>Lockers, Chairs, Blinds and sundries</td>
<td>1,000 - I</td>
</tr>
<tr>
<td></td>
<td>£205,415</td>
</tr>
</tbody>
</table>

Excavations of site and Court of Honour, 1927.

|                             | £553 - J    |
|                             | £205,968    |

As the total sum in sight was £175,000 made up of £150,000 Hackett cash and £25,000 promised by the Government to be paid three years hence in 1933, the position was sufficiently serious.

To the Senate meeting of 17th November 1930 Alsop submitted a statement in which he advised the following alterations which he said would not impair the Architecture of the Buildings.

1 Omission of external Hoods to windows
2 Simplification of Design for the Cornice
3 Reduction of Concrete in the walls
4 The reduction of acoustic material
5 Omission of plastering to undercroft and elsewhere
6 Omission of Acoustic plaster in Ceilings
7 Saving on electric light fittings
8 Omission of certain paving
9 Simplification of the Senate chamber roof
10 omission of coffering
11 Saving on Rose window construction
12 Omission of Rendering window to escape stairs.

By these omissions Alsop estimated the Building could be finished so far as Brine and son were concerned for £175,000. These varying estimates are most confusing. Sometimes they include the sundries in the Statement of August 1930 amounting to £19,327 and sometimes they are excluded.

This Statement of 17 November 1930 also includes the assertion that the money available was £189,810. How the sum was made up is not stated. It seems to have been arrived at as follows.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hackett bequest for Building</td>
<td>£150,000</td>
</tr>
<tr>
<td>Accumulated interest for two years</td>
<td>£15,000</td>
</tr>
<tr>
<td>before the Building was begun</td>
<td></td>
</tr>
<tr>
<td>Refund it was hoped to get from the</td>
<td>£25,000</td>
</tr>
<tr>
<td>Government</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£190,000</strong></td>
</tr>
</tbody>
</table>

Less amount spent in excavation for the Buildings.

To the Senate a month later 15/12/1930 Alsop again reported amending his estimate of costs "so far as Brine & Son are concerned" to £179,000. He also stated -

"I have been considering further ways of reducing the costs without detriment to the Architectural qualities of the Buildings. I am of the opinion that much of the Brick interior walling and vaulting is too good to be covered. I therefore recommend that this be properly jointed and treated to finish the Brickwork. This applies to portions of the Foyer, upper Foyer and passage leading to the Senate Chambers. I recommend also that portions of the wooden panelling on the side of Winthrop Hall be omitted showing the Bado in Brickwork."

All this estimating and re-estimating and the alteration of plans pointed to the approach of a financial crisis.

In May 1930 the Chancellor (James) with the Pro-Chancellor and Vice saw the Premier with regard to the promised £25,000 towards the cost of the Hackett Buildings.
But the great depression of that period was in full swing and the Government were hard pressed to find money for unemployed relief and other urgent calls so nothing came of the deputation except a request that the matter be deferred to 1933.

In October 1930 the Senate considered the large deficiency in the funds necessary to finish the Building. Messrs. Brine the Contractor with Glennon and Byatt, who were Alsop's two representatives on the job reported on the possibility of certain economies with which Brine estimated the Building could be finished for £50,484.

By the November Senate meeting it was found that the money for the Building was almost exhausted and -

"before the end of the week it would be necessary to draw on the Permanent Endowment (Scholarships) to pay wages pending the passage of the Act of Parliament"

The act here spoken of was a proposal discussed at the time by which the University would lend to the Government out of Trust funds £70,000 to build the Physics and Chemistry Building and it was also suggested that we could get the promised refund of £5,000 in the same way.

"When money for Building is exhausted money from the Permanent Trust (the £200,000 Hackett Scholarship Trust money) should be paid into a new special account, so that it will not be necessary to draw on the Permanent Endowment to pay for the Building. This special account to be recouped when money is available to pay for the Building, that is when the proposed University Building act is passed or when the £25,000 is paid by the Government."

The proper thing to have done when the money for building was all spent was to have stopped the Building. But the Senate preferred the foregoing piece of financial legerdemain to draw, in breach of Trust, upon the Scholarship money for Building until the Government did something.

To draw directly from the scholarship money for Building without any face-saving intermediary stage was obviously improper. It was a breach of the Order of the Court which allotted definite amounts for the two purposes and it was therefore, illegal. But it was apparently argued that if you paid Scholarship money first into what was called a special fund you could quite properly draw on
that special fund for Building purposes, because of the intention to recoup the special fund when something turned up. A very similar line of reasoning has been used by many thousands of erring employees who have borrowed their employers' cash to back a winner, in which event the employers' funds would be recouped.

The University Building Act 1930 was assented to in December 1930. It, at long last agreed to the refund of Taxation on Hackett to the amount of £25,000 as a contribution towards the cost of Hackett Buildings but it contributed no cash. It authorised the Senate to sell or borrow against Scholarship Trust securities to the extent of £25,000 which the Government undertook to repay by installments over 30 years with interest at 5%.

The act provides in Sec.1. that it was to come into operation at a date to be fixed. Although assented to in December 1930 it was not proclaimed until June 18, 1934 to come into effect as from June 6, 1934. As the Buildings were finished and officially opened April 13, 1932, the act was of no assistance whatever in financing the erection of Hackett Buildings.

When the act was passed (Dec. 1930) the great depression was well on the way and the Government had all they could do to find money for doles for the unemployed.

The funds available for Hackett Buildings were still £165,000. To quote from a return submitted by Whitfeld to the Senate February, 2, 1928.

"If we cut out any expenditure on Books during 1929-30 (which would be more justifiable in view of the overcrowded state of Irwin Street Library), we might build up a reserve fund approximately as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1927</td>
<td>2,000</td>
</tr>
<tr>
<td>1928</td>
<td>5,000</td>
</tr>
<tr>
<td>1929</td>
<td>6,300</td>
</tr>
<tr>
<td>1930</td>
<td>2,200</td>
</tr>
</tbody>
</table>

15,500

If we add this to the Capital of £150,000 we get a total of £165,000."

This £165,000 was the total sum in sight. As the original Contract without extras was £181,000 every one knowing the facts must have foreseen grave financial complications.

Although Alsop in his letter of 25 April 1930 spoke lightly of a "quick trip to London" for a personal interview with Bagenal it is evident from the nature of some of the letters and wires received from him while in England the Continent that he also was concerned about the possibility of finishing the Building with the money available and that one of his reasons for going abroad was to get ideas as to how to modify the design and reduce costs.

In October, 1930 the Vice reported to the Senate - "good progress with Winthrop Hall — the reinforced concrete forming first floor over Great Gateway was poured last week." A wire has been received from Alsop "Rhodes House, Town Hall Stockholm and Budapest have confirmed many economies. I have been considering in A block (Winthrop Hall) an advantageous design which will effect a substantial saving".

Mr. Glennon, Alsop's representative on the job has received the following radiogram - "Lower the Hall wall another five feet, redesigning window-heads, rose window, ceiling, cornices, panelling, masonry finish walls. I will give details on arrival, leave undercroft unplastered!"

Alsop arrived back about February 1931. Vice Chancellor Whitfeld left Perth for Europe on April 7, 1931. I was appointed Acting Vice-Chancellor for the period of his absence. Immediately I took office a financial crisis developed. This was caused by overdrawing on the Building account, the use of Scholarship revenue for Building and the refusal of the Bank of New South Wales to honour further cheques. To meet this crisis became my task and how it was done belongs to the story of my period as Acting Vice-Chancellor.
In the meantime the Building proceeded. I as Acting Vice Chancellor reported to the May meeting - "The tiling of the roof of Winthrop Hall should be ready about 24th June. The Senate Chamber will be practically complete by the end of July (1931) but it may not be possible to use it until near the completion of other buildings as the marbel floor of the foyer may not be completed until September or October. Other reports followed each month."

Vice Chancellor Professor Whitfeld returned from Europe on September 15th 1931. He did not show least concern about the financial crisis and consequent loss of scholarship capital which had to be dealt with while he was away enjoying himself. He made absurd fuss over a small doll size statuette of Socrates which he had brought back with him. To such an extent did he carry on this that one occasion on coming into his room and being met with some remark about it and remembering all the worry and work necessary in his absence to square up the financial muddle he had left behind him, I felt a strong urge to toss the ridiculous doll out of the window. Fortunately I was able to restrain myself in time.

In March 1931, Alsop presented a Bill for £1220 for professional work done on features of the building which had been cut out. This seemed to many as unreasonable. There is no doubt that work had been done on the discarded features, but he was our architect and had undertaken to design a building which could be constructed for the funds we had. The tenders showed that he had underestimated the cost of his design by a large amount. Should he not therefore forego the cost of his erroneous calculation.

The matter was referred to Sir Talbot Hobbs, as a representative architect to say if the Bill was reasonable.

I have not been able to ascertain what portion of this bill was paid.

July 1931, Alsop's Bill for £1,150 being 2½% on £48,000 (£1,200) less £50 for work not completed -
Could complete the plans (of Physics and Chemistry) Whitfeld urged that Alsop complete the plans. Decided to accept plans as they are at present and pay £1,150 as recommended by Hobbs. The money for the present to come out of Hackett Building Account. To finance this we had to sell Committee Stock when it was down to about "\$1,800; this little bill cost us £1,955."

This was the price the University had to pay for accepting Whitfeld's remarkable recommendation that Alsop be appointed Architect for the Science (Physics and Chemistry) Buildings. Three years after he had been definitely informed by the Under Secretary, Public Works Department that the Government would insist upon their own Architect. For the £1,955 the University got a perfectly useful set of unfinished plans.

At the Senate meeting, December 1930, it was decided that future meetings should be held at Crawley. Accordingly the March 1931 meeting was held there.

There is nothing in the minutes of the meeting to show that anything was done or said to mark the historic importance of the occasion. The fact that the meeting place was at Crawley is to be gleaned only from heading.

Minutes of the Senate meeting of 16th March, 1931 held at Crawley. In which room the meeting was held is not stated. To a Senate meeting held on 20th April, 1931 the Chairman announced that the Senate Chamber would be ready by about the end of June or July 1931.

My recollection, confirmed by Professor Ross, is that for the first Senate meeting held at Crawley, the room known as the Senior Common room was used. It was at the West end of the Library first floor.

In September, Alsop reported he had made a mistake, Messrs Marco's contract for the marble in the Foyer was £3,370 not £2,200 as perviously stated.

All the marbles used in the Foyer were imported.
When asked why some Australian marbles were not used the reply was that they were all too soft. This, of course, is merely an expression of prejudice.

Money was also required for (1) Furniture and Roads and (2) To put the Pillars in the Undercroft in order.

These pillars as well as other portions built of reinforced concrete were still as they were when they first hardened. They showed the shape of all the timber used in the construction of the forms built to receive the concrete when first poured into these forms. On the inside the intention was to cover all these impressions of the temporary timber with plaster and on the outside the design was to dress them smooth and polish the pillars. One pillar was rough dressed, but the process was a very costly one and as they are today they will, I fear, remain.

With suitable pomp and ceremony the Hackett Buildings were opened on 13th April, 1932. This was just ten days short of three years from the laying of the foundation stone on 23rd April, 1929.

At 11 a.m. the Hall being filled by the public, Miss Patricina Hackett, a daughter of Sir Winthrop, the builder; Mr. W.L. Brine and the Architect, Mr. Rodny Alsop advanced to the front of the dais. In accordance with custom, Mr. Brine handed the Key of the Hall to the Architect signifying that his task was completed.

Addressing the architect, Mr. Brine said:

"I have much pleasure in notifying you that having completed our work to plans and specifications we are now able to ask you to accept this key with which the Building is to be opened. Our association with you has afforded us the opportunity of giving expression to our ideas, and we trust this has been done to your satisfaction and that of the proprietors. We are proud of our achievement and we hope that the result is pleasing to the Senate and the fitting monument to the memory of the donor."

Accepting the key, Mr. Alsop replied:

"I have much pleasure in accepting this key of Winthrop Hall, which you have presented for this formal opening of the Hackett Memorial Buildings. By accepting it I signify that as architect I pass the work. I appreciate the loyalty, the wholehearted co-operation and the keen enthusiasm shown throughout by you and all those under you who have helped us so fully in the execution of the design."
Facing the crowded Hall, Mr. Alsop said -

"Now I have pleasure in handing the key to Miss Patricia Hackett signifying that the work has been passed and that my work is also finished. I must admit that after five years of thought and care, and the absorbing fascination of watching the growth of one's ideas, I cannot help feeling a certain sadness at relinquishing control."

Turning to Miss Hackett the architect said -

"In tendering to you this key, I assure you that I and those associated with me have endeavoured to the best of our ability to see that the work done complied fully with the wishes expressed in the Will of your Father, Sir John Winthrop Hackett."

A quiet, "I thank you" was Miss Hackett's response as she accepted the little box containing the ornamental key.

In response to a knock on the door of the Hall, Miss Hackett, the Architect and the Builder left the dais and walked down the central aisle. Opening the door with the key that had been handed to her on the dais, Miss Hackett admitted the Chancellor, the members of the Senate and the University Teaching Staff who had gathered in the Foyer. Miss Hackett and Messrs. Alsop and Brine returned to the dais followed by the Senate and Staff in procession.

When his Excellency the Administrator (the Chief Justice, Sir John Northmore) had taken his place on the dais, and while the audience was still standing the Warden of Convocation (Mr. G.J.S. Norton) read the Bidding Prayer. Footnote. This is the prayer read at each Degree Ceremony.

Addressing the Chancellor in a clear well-modulated voice and speaking without notes, Miss Hackett made a suitable speech. The matter and delivery of which showed that she had inherited some of her father's gifts.

Reply to Miss Hackett, the Chancellor, Sir Walter James also made a suitable speech in the course of which he quoted with admiration and approval from Hackett's Will:

"Considering the importance of fine buildings in the education and refinement of the citizens of a State I direct the sum shall be expended in the erection of a University Hall."

In those words, Sir Walter proceeded the importance of fine Buildings in the education and refinement of
the Citizens of a State is set out tersely the story of
a vision and today we assemble to greet this vision which
has become splendid fact.

Various functions were held to celebrate the
opening.

Mr. Alsop, the Architect in the course of a de-
tailed description of the Buildings said -

"From what did the style of Architecture of the
buildings develop? This is a question difficult to an-
swer shortly, but generally speaking it arose as the
natural outcome of the planning combined with the study
of the architecture of older countries with climate and
other conditions not unlike those in Western Australia.
Certain conditions were laid down, certain accommodation
was required. There had to be a hall to accommodate so
many persons (one thousand not including dais or gallery).
It must be monumental attractive suitable for all purposes,
speaking, music, debate and dancing......... Simple in form
Winthrop Hall is a plain rectangle as far as the dais,
but with walls nine feet thick having window recesses six
feet deep before coming to the glass ............ The
ashler facing of the walls, generally is carried out in
limestone obtained from the University Quarry at Coogee.
This stone was selected by the Architects after exhaustive
inquiry and tests of all similar stones obtained in the
Metropolitan area."

Footnote. The hall is 135ft by 60ft, being the same
length as the great Hall in Sydney University and 15 ft
wider. It seats 1,069 persons in the body of the hall and
150 on Dais. Height from floor to Ceiling 50ft. Top of
Tower is 150 ft. above the Court of Honour now Whitfield
Court.

ALLUING
according to Mr. Benson's decoration of the
ceiling Mr Alsop said -

"The subtlety of Mr. Benson's work in the
paterning of the ceiling is masterly, and when one exam-
ines the detail one finds that the patterns are made up
of dogs, boomerangs, kangaroos, mankind and all manner
of things depicted after the manner of the aboriginal/
Australian."

I may mention here that while engaged on the
work, Mr. Benson told me, the writer, that he intended to
follow a custom, common on the Continent of Europe, of
working into the design for the ceiling decorations, draw-
ings of the heads of those prominent in connection with
the building. He made a sketch of the heads, (photos would
not do), of the Chancellor, Sir Walter James, Pro Chancellor;
Dr. Battye, Chairman of Finance Committee, Sir John North-
more, and Acting Vice Chancellor, W. Somerville. The Vice
Chancellor Whitfield was in England. These sketches he
embodied in the designs on several of the Beams nearest to the Rose window end. They can only be seen by standing close to the end wall and looking straight up when the portraits can be seen on the right and left of the observer.

For some years these sketches have been beyond the range of my eyesight, but on the authority of an article in the "Black Swan" the students' Magazine, the drawings of James and Bettye are on the third beam from the end and those of Northmore and Somerville are on the fourth.

When asked about the style of Architecture, Mr. Alsop said -

"While the ancestry of the style is undoubtedly Italian, it has been anglicised and adapted to the local conditions and cannot be called Italian, Spanish or any other foreign style. It is my conception of the architecture suitable for the University of Western Australia."

In some notes on the origin and growth of his conception Mr. Alsop had written -


The style of architecture to be adopted in any case is largely the outcome of particular and often peculiar conditions, such as climate, materials and usage.

The Renaissance or classic influence on Architecture has been adopted in England since about 1558. The Early Elizabethan style heralded the Early Renaissance movement, and was peculiarly English - but this was followed by the mature classic of Inigo Jones. Wren's manner which followed was replaced by the later Palladianism, that shaded into the delicate work of the Adam brothers, (which we see at the Edinburgh University) that delightful style of the Georges, which continued on until about 1830, about a hundred years ago.

This latter style - the Georgian (1702-1830), as it is now called, is the Architecture known to the early pioneers in Australia and employed by them in many parts of the country - and it was to this style that we first turned to when we began designing the University for Crawley.

As the Renaissance work had to be developed and acclimatised to suit England, and thus became an English style, so in using it in Australia it requires further development and acclimatisation. In the case of Perth where could a similar development be better studied than in the similar climates of the Mediterranean and particularly at its fountain head - the birthplace of Renaissance Architecture - Italy?

It is not our wish to transplant foreign Architecture in Australia, but to develop a style retaining
to some extent at least the traditions of our fore-
fathers, but at the same time providing buildings that
are practical for their purpose, and climate, and sound
in construction and design — and by searching and study,
one constantly finds details that are applicable, that
have been used, and stood the test of time.

When the designs were called for my wife and I
had only been a few months back from a long trip through
the Mediterranean countries during which we had taken
some twelve hundred photographs of architectural sub-
jects in Spain, Sicily, Italy, Constantinople and Egypt.
very round, for although the Architecture of the Egyptians can be seldom made use of in modern work owing to its immensity, the wonderful use of rich colour on their columns, caps, walls and ceilings showed the great value of its use in a bright and sunny climate. From there we went to Naples and then to Sicily and it was here, and later when we had wandered in a leisurely manner up through Italy, that we found the most suitable material for readaptation to Australian conditions.

There is something in the Architecture of such towns as Siene, Perugia, Assisi, and Ravenna that seems so exceedingly suitable to this country. Architecture of simple lines and surfaces, arches on columns - The Early Renaissance still affected by the Romanesque of Lomberdy, and by the Byzantine of Venice and Ravenna, and through it all retaining something of the stability strength and dignity of Imperial Rome.

From what I have said it appears that the Architecture of these buildings cannot be fixed as belonging to any particular country or period. Whilst following to some extent certain traditions of Renaissance Architecture we wished, as the Renaissance Architects did, to go back to first principles, and evolve the design to suit the conditions of site, climate and the purpose of the buildings, whilst bearing in mind that "Architecture makes its aesthetic appeal by its own inherent qualities of rhythm and proportion, spacing, mass, and outline."

Thus the fall of the ground demanded, to our eyes, a floor well above ground. Hence the undercroft of the Winthrop Hall. The appearance of strength is given by rough columns below, with rusticated arches, and finer double columns above. Somewhat similar solutions of the problem were made at the Broletto at Como (using 2 coloured stones), at the Doges Palace, Venice, and at Stockholm.

In England, as in other northern countries, windows are designed to let in as much light as possible. In Southern Europe the effects of the hot sun and strong light, are tempered by protecting the glass by the use of ornamental masonry which forms the main decoration rather than the glass itself.

This had to be borne in mind when designing the large rose window of the Winthrop Hall, which has been based largely on a fine example in the church of San Francesco at Assisi, and so the detailing of each portion of the design has been considered.

There is very little in University records about the beautiful Mosaic work we owe to the Artistry of Napier Waller.

Alpso in a letter to Whitfield, 13/6/32 -

"You may be interested to hear that Theodore Fink (no mean judge of Art) told me that he considered the Waller Mosaic over the gateway is the finest work of art that has yet been produced in Australia including painting and sculpture, he was too discreet to mention Architecture."

An article published in the Perth Daily News
3/9/31 while the work was in progress is of great interest, the relevant portions of it are here included -

**AN ANCIENT ART MOSAIC AT OUR UNIVERSITY - Mr. N. Waller's Fine Work.**

Among the many artistic features of the great pile of architecture rising at Crawley is one that is unique in the history of this State. This is a beautiful example of one of the most ancient of all arts - glass mosaic - executed by Mr. Napier Waller, of Melbourne, and placed in an imposing position high on the wall above the great gateway which forms the main entrance to the central block of the University buildings.

Mr. Waller is well known in Australia for his remarkably fine work in stained glass. The Stephen memorial window in the Melbourne University - a most beautiful theme of color and pattern - was completed by him about three years ago. His mural decorations also have been acclaimed as high-class achievements. Outstanding among these is an extensive piece of decoration on the walls of the National Gallery in Melbourne.

This gifted artist and craftsman had the great misfortune to lose his right arm during the war, while engaged with the Australian artillery at Bullecourt. Overcoming this disability, however, he has mastered every medium in which he has chosen to work - wood engraving for illustration, mural decoration, stained glass work, and now mosaic. Sincere artist that he is, Mr. Waller has not been content to evolve the design of the mosaic ornamentation for the Perth University and carry out its artistic interpretation, but has come here personally to supervise the placing of his fine creation in the position from which it may well charm the eyes of countless thousands through the generations to come.

**70 DIFFERENT COLOURS.**

Entitled "The Five Lamps", the mosaic depicts five graceful female figures clad in flowing Grecian draperies of gentle grey and white hues, limned against a sky of rich blue. Each woman holds aloft a lamp of gold, and the wonderful colour scheme of the whole work embraces no less than 70 different gradations of colour, of which blues, reds and browns are the dominant tones. The mosaic work is carried around the five window heads above the figures, and under the soffits or arches at the bases of the windows. Beneath these arches are lettered in mosaic the names of five philosophical divisions represented by the female forms, namely, Sapientia, Intellectus, Portitudo, Consilium and Scientia.

**A THOUSAND YEARS.**

Questioned regarding the durability of his creation, Mr. Waller replied with a smile: "It will hang together as long as Portland cement will, and should be as pristine as ever in a thousand years' time."

"It must be a great incentive to an artist to feel that his work is likely to last so long," commented the visitor.

"Yes, the feeling of the security of one's materials certainly adds greatly to one's pleasure in doing mosaic work," was Mr. Waller's reply.
The artist mentioned that all the tesserae he uses are manufactured in Venice, which has maintained its great reputation for glass-making for many centuries. The colours which are used in such rich variety in mosaic are infused into the glass while it is in its molten state, and thus possess a lasting quality which makes this form of work unique in exterior colour decoration.

Mr. Napier Waller's account is also of interest — Amount due to Napier Waller of Fairy Hills, Ivanhoe, Melbourne for Mosaic Panel. To supplying and fitting Mosaic Panel above the Senate Room window at £2/10/- per super foot. 110 sq. ft. at £2/10/- = £275/-/-.

Alsp's description of the lettering on the Foundation Stone of the Hackett Buildings is of interest. In a letter dated 27th March 1929 he says —

"I have sent off today rather rough details of the Inscription on the stone .... I have treated them almost as the old manuscripts were treated, emphasising an occasional word by a slightly increased size. Otherwise with the exception of the words Sir John Winthrop Hackett which are about three inches in height, the main lettering is 1/3rd" the specially emphasised words being 1.7/8ths" .... .... I have used a modified SERLIO type based upon the writing on Trajan's Column at Rome."

One feature of the Design for the Hackett Buildings to which Alsop attached importance was the reflecting Pool. Anyone who has visited it on a still moonlit night or when the buildings are flood lit will agree that the idea was an inspiration.

It was not in the original estimates and so not in the contract. The final cost of the buildings was so much in excess of the first estimates and the financing had caused so much worry that the Senate was opposed to any further expenditure. However, Whitfeld was very keen to have it constructed, so much so that he offered "to find at his personal cost the materials necessary on the understanding that the Senate would refund him the money in three years if then it wished to do so." The Senate were not prepared to allow this self-sacrifice and voted £40 for material (cement) and suggested that the students supply the Labour. This was done and with the assistance of the Gardening staff the Pool was constructed, March 1932.
For a number of years it filled its purpose perfectly but after that it became fouled with an ugly floating algae. This has up to the present (1946) defied all the knowledge of the University Chemists and Biologists. The only cure suggested is a solution of copper. Unfortunately to affect the algae the solution has to be so strong that it kills all other life including the gold fish.

Allop was undoubtedly a great Artist but unfortunately not so skillful on the business side of his profession. His estimates of cost were almost invariably much below what anyone would do the work for. He knew that the total cash available at the time he was engaged was £150,000 and yet he prepared plans and specifications for a building for the construction of which the lowest tender was from Hawkins & Son £228,000.

After drastic alterations this firm amended their tender to £195,212. This was still £35,000 more than the cash available so after further negotiations Erine & Son tendered £181,179, this was still about £16,000 more than was in sight but the Senate was apparently prepared to gamble on getting £25,000 from the Government.

On April 20, 1931 the Chairman of Finance Committee Sir John Northmore presented the following figures -

<table>
<thead>
<tr>
<th>Buildings Payment to Erine &amp; Son</th>
<th>£193,727</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other expenditure</td>
<td>£212,904</td>
</tr>
<tr>
<td>? Extra Architects fees claimed</td>
<td>£214,129</td>
</tr>
<tr>
<td>Money available</td>
<td>189,810</td>
</tr>
<tr>
<td>Deficiency</td>
<td>£24,314</td>
</tr>
</tbody>
</table>

Sir John estimated that taking into consideration the probable expenditure on Roads and the Court of Honour (now Whitfeld Court) the deficiency would be about £26,000.

It was decided to ask the Supreme Court for permission to make a 10% levy on all the Hackett Trust monies to raise £27,500 exclusive of loss on sale and agents commissions realising on our securities. Owing to the Depression the sale was only possible at a severe loss.
gives a list of sale price of Commonwealth stock at 11th November 1931. 10 lots averaged £11 below par.

According to Parker the total loss on sale was £5,939. To this should be added £510 interest on the overdraft prior to sale of securities making £6,449.

Footnote. If the average below par was £11 and the total loss £5,939 then the stock sold amounted to £53,900. As £25,000 provided for in University building Act 1930 and £27,500 permitted by Courts Order a total of £52,500 had to be found the loss of £11 as each hundred must be very near the fact.

This £6,449 should be added to the cost of the Buildings and so should the £27,500 all of which was spent.

Cost of Hackett Buildings as given by Sir J. Northmore up to April 20, 1931
Special levy on Trust funds permitted by Court
Add loss on sale of Securities during 1929-30-31
Add Interest on overdraft pending sale of securities

Approximate Total Cost of Hackett Buildings

In a private memorandum book kept by Parker apparently for his own satisfaction is the following list of payments up to May 4th, 1932.

PAYMENTS IN CONNECTION WITH HACKETT BUILDINGS UP TO MAY 4TH, 1932

1. Brine & Son £196,185
2. Wages & Sundries for work done after Brine & Son handed over 115
3. Fees paid to Alsop & Sayce 12,229
4. Excavating Site in 1927 552
5. Salary Clerk of Works 2,073
6. Salary Building Clerk (Mr. Holmes) 1,389
7. Audit fees 133
8. Berryman ex gratia 259
9. Law Costs 41
10. Fire Insurance 21
11. Steel shelving 2,737
12. Purchase of Quarry 279
13. Water Supply mains 273
14. Telephone cables 39
15. Hope Bagwell report fee 52
16. Gas Mains 18
17. Fittings Guild Building 46
18. Kitchen equipment 346
19. Excavating and forming grounds around buildings 400
20. Equipment  £26
21. Miscellaneous  263
22. Cost of Chairs for Winthrop Hall  467
23. Expenditure on material (cement) for pond  40

£217,993

The total cost of Hackett Buildings £248,073 is £20,000 more than the lowest tender received in the first instance from Messrs. Hawkins & Son £228,628 for the buildings as first planned including the second story as the Guild quarters and all the features eliminated at Alsop's suggestion (see page 454) to reduce costs. So the net result of all the changes in the basis of the contract and the estimating and re-estimating over a period of years was that the Buildings cost £20,000 more than a reputable firm of building Contractors had been willing to undertake their erection as first designed.

The terms of the Architectural Competition were very definite, Clause 14 says - "the total sum available for the Buildings which form the subject of this competition is £150,000."

This is the sum Alsop said his design could be erected for. An increase of £98,000 over the stipulated figure is very great. But who will question the belief that the people of W.A. got full value for every penny of it. The most regrettable feature of the struggle to find the extra £98,000 was the levy of £20,000 on the Hackett Bursary Fund. A condition attached to this was that it had to be replaced by annual payments of £2,000 from the income. The average Bursary was at the time about £40, so the annual deduction of £2,000 from the fund meant that in each year for 10 years about 50 young people were denied the opportunity Hackett intended they should have. However, their loss led to the gain of unknown numbers for without this levy the buildings might not yet be finished.

It was well said by the Chancellor, Sir Walter James, when (19/6/35) dedicating the Alsop memorial seat -
"In Rodney Alsop we were doubly blessed. He was an artist who could dream dreams; a creator who could reproduce them in stone. In the Winthrop Hall he has given us a thing of beauty; day by day exercising its cultural influence on every student and year by year raising the standard of public taste."

This is very true but at the same time one who knows the number and character of the alterations made necessary by want of funds will regret the lack of £100,000 by which the full measure of Alsop's dream could have been realised.

All the alterations made were detrimental. Perhaps the most serious was the lowering of the height of the walls. By how much this was done is not clear. Alsop's dramatic radiogram (October 1930) to Mr. Glennon his representative on the job began "Lower the Hall wall another five feet" this would suggest that some reduction in the height had already been made. Whether this was so or not it is obvious that another five or six feet of wall above the Rose window is necessary for balance. This is particularly noticeable from the gallery at the west end. Another regrettable alteration was the substitution of Donnybrook stone for Marble in the construction of the balcony under the Clock in the Tower. Imagine this Architectural gem in glistening white marble against the cream of the Coogee stone in our strong sunlight.

A comparison between the finished building and the model prepared from the first plans for the use of the Contractors shows very clearly the change in the proportion between the height of the Hall and the height of Tower brought about by the reduction in the height of the hall walls. It is undoubtedly detrimental. So also is the elimination of the ornamental hoods over the windows outside.

Alsop (15/12/30) says - "I am of the opinion that much of the brick interior walling and vaulting is too good to be covered." But when he said this he was being repeatedly and urgently pressed to reduce costs. So all the jarrah panelling of the first 15 ft of the wall from
the floor of the Winthrop Hall was eliminated, the brick vaulting of the passage to the Senate Chamber and portions of the lower and upper Foyer which was designed to be plastered was left bare, the Senate Chamber which was to have had a vaulted ceiling in stone was given a flat plaster ceiling, all the concrete work in the undercroft was left as it set in the timber moulds etc., etc. It is possible and even probable that in time these partly finished features will in the eyes of the uninitiated acquire a virtue and be admired but not by a craftsman. If the craftsman who did this brick and concrete work had known that the work was to remain as they finished it they would have seen to it that it was finished in such a way as to be a credit to their craft, but they were told it was to be finished in plaster and so they followed the proper trade, custom and left the brickwork rough so that it would provide good "keys" for the plaster.

Footnote, giving full list of features in Alsop's own words which at his suggestion and to reduce costs were eliminated from the design.

1. Omission of the external hoods to the windows.
2. Simplification of design of cornice.
3. Reduction of concrete in the walls.
4. Reduction of acoustic material.
5. Omission of plastering to undercroft and elsewhere.
7. Saving on electric light fittings.
8. Omission of certain paving.
9. Simplified construction of Senate roof.
11. Saving on Rose Window construction.
12. Omission of rendering to escape stairs.

Mr. Alsop stated - "I have been considering further ways
of reducing the costs without detriment to the architectural qualities of the building. I am of the opinion that much of the brickwork interior walling and vaulting is too good to be covered. I therefore, recommend that this be properly jointed and treated to finish as brickwork. This applies to portions of the Foyer upper Foyer and passage leading to the Senate Chamber. I recommend also that portions of the wooden panelling on the side of the Winthrop Hall be omitted showing the dado in brickwork."

After these recommendations were approved by the Senate and put into effect.

Alsop died suddenly in November 1932, about six months after his work in connection with the Hackett buildings was completed. He had been for many years subject to violent attacks of Bronchial Asthma. A movement was immediately begun to erect a memorial. In conversation with Whitfeld about the final touches to the surroundings, Alsop had mentioned that to complete the Reflecting Pool a stone seat should be erected at each end. When a memorial was mentioned, Mr. Benson sketched a suitable design and this was erected and dedicated (14/6/35)

At the dedication Whitfeld paid this tribute to the dead Architect.

"Any man who works for an idea and finishes his work deserves a crown of honour."

We are offering that crown as well as we can to the Architect of these buildings. He thought of little else but the Hackett Buildings for six years, and when he had given us the best buildings that he could he died. He strove to give us beauty in our buildings and we think he succeeded.