CHAPTER 15.

APPLECROSS PINE PLANTATION.

now

SOMERVILLE PINE PLANTATION.
APPLEGROSS PINE PLANTATION

From about the year 1918 until the University Departments were shifted to their permanent home at Crawley a group of men met for lunch at a small restaurant in Barrack Street called "The Dell." It was upstairs over a shop and was kept by a lady named Dorcas. The head of the table was occupied by Mr. Cecil Andrews as a very informal Chairman — in that capacity he was quite a genial soul. Professors Shaw and Wilsome were constant attendants; Professor Murdoch frequently came; Professor Whitfield only occasionally, when in town, for his Department (Engineering) had been shifted to the old Shenton Homestead in 1914. With Mr. Andrews I represented the Senate; Mr. A.E. Joyner of the Bon Marche stores and Mr. Wigmore represented business, Drs. Atkinson and Dale the Health Department, and Mr. Lane Poole, the Conservator of Forests, and his assistant Mr. Kessell represented Forestry. We had the pleasure of entertaining a number of distinguished men at intervals over the years — two I recall were Professor Edgeworth David just after his Polar Journey, and Dr. Marshall an Australian Biologist who had made a considerable reputation in England. The University was at the time in Irwin Street so "The Dell" was quite handy to it and all the Departments of Public Administration. Not long after I joined the group Mr. Lane Poole secured a Federal appointment.

As can be imagined when such a body of men met over food the problems of the world were discussed with great zest. Among other subjects Forestry received considerable attention. This was due not merely to the presence of Mr. Kessell, but to the fact that about that time a large amount of Australian money was being invested in New Zealand Pine Forests. The remarkable growth of
what was then known as the Pinus Insignis, now renamed Pinus Radiata, on the land covered with volcanic scoria and ash, had given the Company Promoter a great opportunity. Large sums of money were being subscribed mostly by wage earners and others who could ill afford any loss.

During these discussions it became known that the Forestry Department was on the look out for an area of considerable size near the city on which to plant pines. I was keenly interested in the University Endowment Lands and on the look out for some means by which they could be made to yield revenue. The only revenue received up to then, and indeed long after, was by letting quarrying rights. This I was strongly opposed to, holding that the so-called revenue from the quarrying of building stone was not revenue at all but a surrender of the capital value of the land, for after all the stone which could be profitably taken from the quarries had gone the capital value of the land was nil.

So early as October 1912 I had moved, and James had seconded, a motion in the Senate "That no further spoliation of Buckland Hill (by quarrying) be allowed." This, after some opposition, was carried. It checked the spoliation for some years but the pressure from the former lease holders and the temptation to get some easy money was too great and the quarrying was afterwards renewed with disastrous results.

Another thing which stimulated the search for some means by which revenue could be got from the endowment was a strong movement among the members of the Senate, led by Mr. Sandover, to sell some of the endowment lands. What was worse, the intention was to use portion of the interest on the money received as a contribution to the current expenses of the University. In May 1920 a long motion of four clauses and two sub-clauses was moved by
Sandover and seconded by Roberts to the effect —

"That the Government be requested to amend the
University Act to allow the sale of endowment lands ....
That the proceeds of all such sales shall be held in trust
for the University .... That the income derived should be
divided —

A. Not more than half of such income shall be used
for the current expenditure of the University.

B. The balance of income not so expended be
invested and held in trust with the principal sum for the
University."

The voting was — for the motion 4, Messrs. Sandover,
Roberts, Mann and Murdoch; against 7, Messrs. Andrews,
James, Sew, Wilsmore, Battye and Somerville.

The decision was decisive but, as subsequent events
unfortunately proved, not so much against the sale of the
land as against the use of some of the proceeds for
revenue. A further effort by the same people in 1927 was
successful and legislation was passed authorising the sale
of endowment land.

As the Forestry Department wanted land for the
purposes of a pine plantation and the University had land
it desired to put to profitable use, it was inevitable
that sooner or later the question should be asked at the
"Dell" luncheon table.

Why not combine? Whether it was Kessell or I who
first mentioned the idea, I do not remember. When once
mentioned it was immediately seen by all interested to be
very desirable and discussion turned to plans by which it
could be realised. As the proposition involved large
financial obligations it was a subject of major policy on
the part of both the Forestry Department, the Government
and the University, consequently the preliminaries took
some time. On behalf of the University the General
Purposes Committee, of which I was Chairman, took the
initiative by asking Mr. Kessell as Conservator of Forests to give a preliminary report as to what the scheme would entail. This he did under date 13th August, 1924. He outlined the necessary steps in fencing, clearing, planting, the provision of a Nursery in which to raise the young trees, and concluded with an estimate of costs as follows:

- Clearing for planting: £3. 0. 0
- Planting: £4.10. 0
- Raising plants: £1. 0. 0
- Fencing: £6. 0
- Formation and maintenance of fire breaks: £2. 0
- Incidental, tools, etc.: £2. 0

Total: £29. 0. 0

Reserve 10%: £10. 0. 0 per acre.

Mr. Kessell further estimated that with experience the costs per acre planted might be reduced to £7 less whatever was realised by the sale of the indigenous timber for firewood.

The first mention of the proposal in the Senate records is when, as Chairman of the General Purposes Committee, I reported on the preceding estimate in November 1924. The Senate appointed the Vice-Chancellor, Whitfeld, and myself a sub-Committee to report more fully after inspecting the site etc. Inspection and further negotiations proceeded, with the result that reports of conferences and two written reports from Mr. Kessell and his senior officer, Mr. Stoate, were presented to the Senate meeting in March, 1925.
University Endowment Lands - South of Applecross
Report on the proposal by C. Stace of the Forests Department, 16th March, 1925

Location and Area:--

The subject area is Location 549 or Reserve 9366 and is situated one to two and a half (1 to 2½) miles South of Applecross Wireless Station; and is traversed from North to South by the North Lake Road as shown on the accompanying plan.

The total area is about 2,300 acres; and is surrounded almost entirely by private property, except on the West where the area adjoins the Fremantle common and Municipal Endowment.

Climatic and Soil Conditions:--

The country is in general gently undulating except on the western portion where limestone out-crops on the surface, and a hill considerably above the level of the surrounding country occurs. (Suitable for fire tower). The geological formation of the surface is probably marine sand of Tertiary age. The soil varies from a white sand over a yellow sand sub-soil, to a brown sand.

Two small swamp areas, one in the North East and the other in the South East corner occur on the area.

Climatic conditions can be regarded as being similar to those of Perth.

Vegetation:--

The greater portion of the area supports typical sand plain jarrah with some banksia (B. attenuata and B. Menziesii) and a lower growth of fairly thick Macrozamia. Tuart in pure sand occurs in small areas in the Western portion, and mixed with jarrah in several situations.

Harri, often of large dimensions, occurs occasionally with jarrah where the soil is a brown sand.

Water Supply:--

It is believed that water is available in most
places at a depth of 10 to 20 feet. Several windmills are erected on adjoining private property.

**Summary:**

The endowment as a whole is particularly suited for the growth of Pinus pinaster.

**Recommendation:**

If it should be decided to use this country for the above purpose, I would recommend that the following action be taken:

1. **General.**

   A planting scheme be instituted involving the establishment of plantations at the rate of 100 acres annually.

2. **Supervision.** by resident Working Overseer, who would be responsible for protection of the plantation and raising the planting stock. General supervision would be exercised by the Divisional Officer controlling the northern division.

3. **Costs.**

   (a) **Preliminary Expenditure.** of £600 to £700 is necessary to establish a Headquarters house, stables, paddocks, etc. and a nursery.

   (b) **Annual recurring expenditure.** of £600 to £700 to provide for the planting of 100 acres annually.

   This cost should be off-set to some extent by the proceeds from sale of firewood and other forest produce.

4. **Preliminary Investigations.**

   Further inspection is necessary to determine the best sites for an Overseer’s cottage and the nursery, and the first planting area.
WESTERN AUSTRALIA
FORESTS DEPARTMENT
Perth, W.A.
16th March, 1925.

The Vice-Chancellor,
The University of W.A.,
F. E. R. T. H.

Dear Sir,

With further reference to our discussion concerning the use of endowment lands for pine plantation purposes, I am forwarding herewith a copy of a report on the only area of sufficient size to warrant the establishment of a plantation.

From all indications this area is well suited for the growth of Pinus pinaster, and a satisfactory profit may be expected from the establishment of that species on the area.

In discussion with certain members of your Senate, it has been suggested that the difficulties of the University financing such a proposal might be overcome if the Department were prepared to establish and care for the plantation under an agreement that the University should share in the profits as the trees reach maturity. You will appreciate the fact that such a proposal is a matter of Government policy, which must be submitted to the Hon. the Minister for Forests.

My own opinion is that any arrangement whereby the area may be utilised for pine planting purposes is likely to prove in the best interests of the State.

There is practically no Crown land so well suited for the growth of Pinus pinaster within 50 miles of Perth, and the proximity of this area to the city will undoubtedly increase the value of the softwood produced, and probably render possible a complete utilisation of any thinnings which it may be necessary to take out from time to time.
In such an agreement it will be necessary to stipulate that the Department shall have unrestricted use of the area for a period of 50 years. The first 100 acres planted will probably be ready for cutting in 30 years' time, after which 100 acres would be cut each succeeding year for the following 20 years.

It is a difficult matter to estimate the profits which are likely to accrue, but from figures obtained from the sale of mature plantations in South Australia during the war period, it would appear safe to state that a clear return of £150 per acre, after expenses had been allowed at compound interest, might be expected at the end of 30 years.

If it is desired to proceed with the scheme, some early action to reach finality would appear advisable, as arrangements must be made at an early date to prepare the nursery for the raising of seedlings for planting out in 1926.

Yours faithfully,
(Signed) S.L. Kessell,
Conservator of Forests.

University of Western Australia
Report of Joint Meeting of Finance and General Purposes Committees, the 30th March 1925

The report of the Conservator of Forests, dated 16th March, 1925, concerning the use of Cockburn Sound — Location 549 (University Endowment) containing an area of 2,300 acres, for the purpose of the establishment thereon of a Pine Plantation, was discussed (Copy of report attached).

The matter was remitted by the Senate at its meeting on the 16th March, 1925 to the Joint Finance and General Purposes Committees with power to act.
The Conservator of Forests, Mr. S.L. Kessell, was present.

A report was received from Mr. G.H. Rumm, suggesting a counter proposal that the University might agree to allocate to forestry say 500 acres as shown in red on the tracing attached, the area shown in blue, consisting generally of a strip 20 chains wide following the main roads through the land amounting to 550 acres approximately, to be reserved in any case.

It was decided -

(i) That the University agree generally to the proposals contained in the report of the Conservator of Forests, the Government to provide the necessary capital expenditure, the profits arising to be shared equally between the Government and the University, subject to any other revenue derived from the University lands being deducted from the cost of afforestation.

(ii) That the Conservator of Forests be asked to confer with his Hon. Minister with the view to the preparation of a draft agreement on these lines.

(iii) That the Conservator of Forests be asked to submit a report on other University Endowment Lands of considerable area, the Conservator having mentioned 500 acres as a minimum.

(iv) That the Conservator of Forests be asked to report on the question of planting Tart on the limestone portions of Locations 549 and 550.

(Signed) Cecil Andrews

Chairman of Joint Committee.

Note:-

The Acting Hon. Minister for Forests has consented to receive a deputation from the University Senate tomorrow, the 21st April, 1925, at 3 p.m. (This deputation consisted of the Chancellor (Saw), the Pro-Chancellor (Andrews) and the Chairman of the General Purposes Committee (Somerville).)
The Senate approved generally and sent the reports on to the Finance and General Purposes Committees with power to act in the matter of drafting an agreement with the Forestry Department. These two Committees in turn appointed a sub-committee consisting of the Chancellor (Saw), the Pro-Chancellor (Andrews) and Somerville, Chairman of the General Purposes Committee. Mr. Andrews found he was too busy as Director of Education so Professor Whitfield was put in his place. Professor Whitfield was at the time Vice-Chancellor and Professor of Mining and Engineering so his time was too fully occupied to participate frequently in the negotiations, moreover his Department was at Crawley while the University office was in Irwin Street, City.

The first draft of the agreement prepared by the Crown Solicitor, Mr. Sayer, was discussed with Russell in June 1925. It was only a rough sketch and much negotiation and many conferences with the Conservator, the Crown Law Department and the University Solicitors were necessary to thrash out all the details for it was an entirely new sort of partnership. There were no existing models from which to copy. An agreement fair to both parties had to be built up from the foundations. It had moreover to be so worded that its meaning would be clear to those who would interpret it long after the original designers had departed and all the circumstances current at the time were forgotten.

Dr. Saw had a large medical practice as well as his parliamentary duties and found these numerous conferences very inconvenient. As a member of the Court of Arbitration I had as big a job as either Professor Whitfield or Dr. Saw, but I had always been keenly interested in any project for the growing of trees. I had read much in a desultory way about forestry and I had established in a small way two plantations of pines on my
own farm, so I fairly revelled in preparing agreements for the planting of an actual forest.

So finally on 17th August, 1925, on the motion moved by Dr. Saw, the Senate adopted as No. 4 of a number of decisions relative to the Forestry Agreement -

"That Mr. W. Somerville be appointed as the permanent representative of the University to co-operate with the Conservator."

After this the negotiations were left to me. Before all the terms were satisfactorily arranged three drafts had been prepared and amended. Finally in December 1925 the Senate authorised an agreement to be drawn.

The agreement is dated March 3rd, 1926. It provides for a partnership between the University and the Conservator of Forests.

The contribution by the University was 2,330 acres of unimproved land, the agreed upon value of which was £4 per acre.

The Conservator was to find all the capital required to plant and care for the trees until the crop on each block of 25 or 50 acres was sold.

The cycle from unimproved land to mature crop of trees was estimated at 30 years and the agreement was in the first place for 50 years. After this period (30 years) the areas from which a crop of timber had been sold might revert to the University or be replanted as might be then agreed upon.

Compound interest calculated on £9,320, the value of the whole of the University land was to be credited to the University as from the date of the agreement.

Compound interest was to be calculated on all money spent by the Forestry Department as from the date of its expenditure.
The rate of interest was to be average rate paid on current State loans.

During a Senate discussion on the terms of the agreement the Chancellor (Saw) queried the absence from the draft of any obligation on the Forestry Department to pay the University the $4 per acre in addition to our share of the proceeds from the timber. I pointed out that the land remained the property of the University and reverted to it when the Pine Planting Scheme terminated. James supported this and the clause was approved.

The most difficult clause to frame was that providing for the division of the proceeds between the parties. The general idea was that each should share in proportion to its contribution. This sounds very simple, but to express it in clear terms free from ambiguity proved rather difficult. After consulting various friends who were accustomed to drawing legal documents I evolved the following:

"When the amounts (the contribution by each party) referred to in (A) and (B) above are ascertained the division of any proceeds between the University and the Conservator shall be in the proportion which the respective amounts credited to each participant bears to the total of the two."

This was approved by the Senate and accepted by the Conservator.

Early in the negotiations the Conservator had suggested that some local orchardist or market gardener should be secured to rear the annual crop of seedling pines. As the agreement provided for the planting of a minimum of 100 acres requiring over 90,000 seedling trees per annum, this proved too big and important a part of the scheme to entrust to outside hands, so it was decided to establish our own plant nursery.

Within the bounds of the University Endowment block
of 2,330 acres there is an area of about 20 acres containing a small swamp and some acres of land which remains so moist throughout the summer that watering of seedling pine trees is unnecessary. This land had been purchased from the Crown many years before the surrounding land had been declared Endowment Land. It was well adapted for the purposes of a plant nursery and Kessell urged its purchase, the owner being willing to sell for £800. I agreed to recommend the Senate to agree to the purchase provided an official valuation of the property showed the valuation to be reasonable. Kessell demurred at my proposal to secure the approval of the Senate. He quoted the terms of the Senate resolution of 17th August, 1925 appointed W. Somerville to be the permanent representative of the University to co-operate with the Conservator of Forests as making further reference to the Senate unnecessary. I on my part did not deem it wise to agree to the expenditure of £800 without first securing the Senate's approval. I mention this matter to show how far my powers under the resolution of 17th August, 1925 extended in the opinion of the Conservator.

The property was ultimately bought for £700.

On 17th March, 1926 I wrote to the Conservator as follows:

"Dear Kessell,

The Senate at its meeting on Monday authorised me to proceed in the matter of the purchase of Locations 45 and 46.

As the whole proposal is something extra to the principal agreement it will be necessary to fix up an addendum to be read in conjunction with it. As a basis for discussion I submit the following -

1. The University and the Conservator agree to purchase Locations 45 and 46."
2. The ground when purchased shall be considered as an addition to the 2330 acres under the control of the Conservator as set forth in Clause 1 of the agreement of 3rd March, 1926.

3. The capital necessary for the purchase of the ground and for such improvements as are necessary will be found by the Forestry Department.

4. The rate of interest to be charged on the capital required by Clause 3 above shall be as set forth in paragraph 7 of the agreement of 3rd March, 1926.

5. The sinking fund for the capital required in 3 above and the interest thereon shall be allotted to planted areas as set forth in paragraph 7 of the agreement of 3rd March, 1926. The sinking fund shall be at such a rate as will liquidate the liability in 50 years from the 3rd March, 1926, when locations 45 and 46 will become the property of the University.

It will be necessary I presume to have the transfer made to somebody. As this is a legal detail it had best be left to the lawyers.

I shall be glad to call on you any evening after four o'clock for further discussion.

Yours truly,

(signed) W. Somerville
(17/3/1926)

On 1st November, 1926 an agreement which embodied the terms of my letter of 17th March in condensed legal form was signed.

The first crop of seedlings was very poor. The cause was diagnosed as lack of a soil mycorrhiza necessary for their health, so some truck of soil from an old pine nursery at Hesel were obtained. This was to inoculate the soil with the necessary organism. Subsequent plantings were satisfactory.
The first planting of seedling trees in 1926 in forest formation was among the indigenous scrub without ploughing. There was a heavy summer mortality and all subsequent plantings were on ploughed ground.

On 16th November, 1929 I submitted to the Senate the attached report:-

16th Meeting of the Senate, 10/11/1929

Report as to Applecross Pine Plantation by Mr. W. Somerville.

A report was received from Mr. W. Somerville regarding the Applecross Pine Plantation, giving a summary of the work to date as per copy attached to minutes.

Following upon Mr. Somerville's report, it was decided to approve of the following recommendations made by him regarding the financial clauses of the agreement with the Forestry Department, which had been endorsed by the Finance Committee:-

(1) That an annual allotment of £99,18.8 should be made over the planted areas each year to liquidate the capital sum of £3,665 in 45 years. This amount had been expended by the Forestry Department for the purchase of a Nursery and equipment.

(2) That the interest to be charged in each year should be the rate paid on Government loans raised in that year, or if no loan has been raised, the next preceding loan, and that the University should accept a notification from the Treasury as to the rate fixed for each year.

(3) The Forestry Department propose to establish a card index of the annual expenditure against each block.

It was decided that this should be initialed as correct each year by Mr. Somerville and the University Accountant, without audit, in view of the fact that all Forestry Accounts are under the control of the Auditor General.

Mr. Somerville was thanked by the Senate for his report.
The first two paragraphs have been dealt with previously; the third is new and important for the provision therein of a card index; and the initialling of the returns have had subsequent effects.

I submitted this report to Kessell for his comments and at the same time requested him to supply any further details he thought might be interesting. He approved (15/11/1929) of the report and added an account of the disastrous fire which occurred in January 1929:

"Conservator's Report on Fire Summer of 1929"

"Fire Loss.

"The loss of two compartments through fire last summer was most unfortunate. Compartment 1, of 21.5 acres, was planted in 1927 and Compartment 2, of 24 acres, was planted in 1926, representing the oldest pines on the area. These pines were showing excellent growth.

"The outbreak occurred on January 20th, when there was a very heavy wind associated with high shade temperature and low humidity. These conditions followed an excessively hot, dry spell. The loss might have been averted if permission could have been obtained to back-fire through an adjoining poultry run, through which the fire approached the plantation from an extensive area of unoccupied scrub country.

"The fire within the planted area was caused by sparks dropping on dry grass between the young pines, and was essentially a grass fire. The period elapsing between planting and formation of complete canopy by the pine trees constitutes the most dangerous period during the life of a plantation. Fire hazards cannot be entirely eliminated, and it was only an exceptional combination of circumstances which caused the outbreak.

"Additional steps have now been taken to protect the boundaries, and it is not anticipated that any further
"trouble is likely to arise from this cause. The unsatisfactory hazard remaining is the trees which are growing along the roads which border the planted area. Unfortunately, the Road Board concerned have taken up an unreasonable attitude in demanding that, if it is desired to remove this hazard, the Department must go to the expense of pulling the trees, and will not allow them to be felled in the usual way. Although desirable that these trees should be removed, it is not considered that the cost involved in pulling them would be justified.

(Signed) S.L. Kessell
Conservator of Forests
20/10/1930.

By letter dated 11th February, 1931 the Conservator queried the necessity of compounding of interest calculations on the contribution of the two participants as provided in the agreement. He had previously complained to me at the large amount of clerical work it entailed. In his letter he says:--

"As the compounding of interest at the same rate on Departmental costs and on the unimproved value of University land on the basis of £4 per acre will not affect the basis for apportioning the major revenue, it is suggested that compound interest be ignored."

No interest has therefore been charged on Departmental expenditure and simple interest on £9,320, i.e. 2,330 acres at £ has been credited annually to the University."

This struck me as a rather startling departure from the terms of the agreement. In a letter to the Conservator on 28th March, 1931 I said:--

"With regard to the suggestion that compound interest be ignored, I am a bit uneasy. Is it not
"possible that the varying rates of interest which will "be charged as the years go on may lead to a different "result than that contemplated?"

By this time Whitfield had departed on six months holiday to Europe and America and I had to deal with the business both as Acting Vice-Chancellor and also as Liaison Officer with the Forest Department. I was in fact somewhat of a Poo-Bah at this time being also Chairman of the General Purposes Committee.

Kessell's reply to mine in which I expressed my uneasiness at the possible results of a departure from the compounding of interest contains the following, under date 30th March, 1931:-

"With reference to the question of interest and "compound interest .... it is possible will be made "clearer by reference to discussions when the scheme "was first mooted. You will recollect that my original "proposal was that each party should be recouped its "outlay at compound interest and that any balance then "remaining, which would represent clear profit, should "be divided 50-50. This proposal rendered the keeping "of accounts plus compound interest a question of some "importance. Subsequently, however, this proposal was "abandoned in favour of the present agreement which "stipulates that the whole of the proceeds shall be "divided pro rata according to respective expenditure, "the expenditure by the University being taken as simple "interest on the agreed capital value of the land at the

Having complete confidence in the success of the scheme I favoured the acceptance of Kessell's original proposal. It was, however, accompanied by a condition that the Forestry Department expenditure would have first call on whatever proceeds there were. This condition the Chancellor (Saw) objected to. He pointed out that if the scheme turned out not as successful as hoped and the proceeds were not more than sufficient to meet the expenditure by the Forestry Department, the University would get nothing. So the division of proceeds in proportion to the contribution by each participant was accepted.
"current Treasury rate of interest. As the amounts on
"which either simple or compound interest is calculated
"at the same rate must increase proportionately the
"agreement to share proceeds pro rata makes the calculation
"of interest and compound interest, except the simple
"interest on University capital referred to above, an un-
"necessary calculation."

This did not quite satisfy me for it did not seem
to give sufficient weight to the fact that while the
University's contribution remained the same each year, the
contribution by the Forestry Department was constantly
growing and was not the same in any two years. Each
compartment planted requires maintenance and other charges
so the gap between Forestry charges and University charges
does not remain constant but is constantly altering.

The problem was further complicated by the special
agreement respecting the plant nursery. The effect of
this agreement as set out by Mr. Parker, the Accountant,
in a report to me:-

"There will be credited to Forestry Department
"$99/10/6 annually for 45 years to liquidate a capital
"sum of £1,655 paid by the Forestry Department for capital
"outlay on purchase of a nursery and equipment.
"

The basis of this calculation was:- £1,655 at 5%,
"compound interest for 45 years makes £18,400. The annual
"amount to purchase £18,400 in 45 years is $99/10/6."

The compounding of interest in this agreement could
not be abandoned without arriving at a new agreement as to
how the Forestry Department was to be recouped for capital
expenditure on nursery land which in 50 years was to
become the property of the University. So the question
still to be answered was - Is it in the interest of the
University to adhere to the compounding of interest, or
can it be abandoned without detriment?

The University Accountant, Mr. Parker, was very
definitely of the opinion that we should adhere to it. I consulted several Chartered Accountants and financial experts. Their opinions were about equally divided between yes and no. The Finance Committee had about as many opinions as there were members.

So finally I put the problem to our highest authority on all matters involving figures, Professor Weatherburn, the Professor of Mathematics. His reply was as follows:

"Apergoa Pine Plantation Accounts.
"Compound V Simple Interest.
"
"The division of profits on the basis of simple interest would not be quite the same as on that of compound interest. The larger interest increases the importance of the earlier increments of credit. The party which has the larger later additions to credit would gain slightly by the use of simple instead of compound interest. As it seems quite certain that future annual additions to the credit of the Forests Department will greatly exceed those to the credit of the University, it would be to the advantage of the University to adhere to the principle of compound interest.
"
"The same argument holds, and to a much greater degree, against the proposal to abolish all interest charges. So far as the University is concerned compound interest is preferable to simple, and simple interest is preferable to no interest at all.

"Question of £1,655 Capital Outlay by the Forests Department."

"According to the present arrangement £99/18/3 is credited annually to the Forests Department. This, or any other system of crediting the Department will give the Conservator an appreciable fraction of the profits from the sale of all the plantings. On the assumption that the enterprise will be a financial success, the
"Department would gain a very considerable sum on this account.

It is not possible to form a correct estimate of the various schemes, A, B, C, without knowing the approximate amount that will be realised on the sale of each year's planting. If this be considerable it would probably be advantageous to the University to agree to a scheme of setting down £1,655 as an amount to be refunded to the Department by way of a first charge on the proceeds of the sale of the trees. But if this plan were adopted the advice expressed in Paragraph 1 might no longer apply. In order not to increase this first charge of £1,655 on the profits it would probably be best for the University to agree that no interest at all be charged on any of the accounts.

(Sgd.) C.E. Weatherburn
(16/4/1931)

Mr. Justice Northmore, who had the previous month become Chairman of the Finance Committee, made the following comment upon Professor Weatherburn's opinion:—

"Weatherburn says compound interest is better than simple interest and simple interest is better than no interest but not better to such an extent as to offset the advantage it would be to us to have the £1,655 discharged from the accounts at the earliest possible date."

In a report on the progress of planting dated 29th April, 1931 the Conservator concludes a covering letter:—

"The result, however, is sufficient to show that the inclusion of interest does slightly affect the ratio at the end of the period, but to what extent depends on the actual cost of each area planted annually."

This confirms and justifies my original uneasiness about the proposal to abandon the compounding of interest, but considered in conjunction with Weatherburn's opinion and Northmore's comment thereon it would seem that the
effect of abandoning the compounding of interest may not be sufficient to warrant the cost of the clerical labour necessary to continue it.

Shortly after the return of Professor Whitfeld from his 1931 journey, Judge Northmore, who had been appointed Chairman of the Finance Committee in March 1931, announced that after reading the agreement with the Forestry Department he was dissatisfied with it as he did not understand the clause which provided for the division of the proceeds from the sale of the crop of timber (sub-clause C of clause 6).

I confess to have been annoyed at this statement. The clause had passed the scrutiny of so many both legal and lay that his failure to understand it struck me as being a mere piece of legal affectation, and I am afraid I was rude enough to tell him so.

I was associated for many years with another worthy Judge in the interpretation of industrial agreements and Arbitration Courts awards. A favourite gesture of his when a document came for interpretation was to hold it at arm's length and say in his deep, rich, bass voice "What on earth does the fellow mean?" What the fellow meant was usually fairly clear, so I rated Judge Northmore's gesture of not understanding the Forestry agreement as equally valid.

I declined to take any part in the discussions on Northmore amending the agreement and its terms were fixed by Northmore, Whitfeld and Kessell. Judging by my experience with Whitfeld and Kessell, I would say that the agreement is almost entirely the work of Northmore. It is a most complex document bristling with algebraical formulae.

After its signature I regarded the Senate resolution of 17th August, 1925 appointing me as "permanent representative of the Senate to co-operate with the Forestry Department" as being suspended or repealed.
and any responsibility which that resolution may have imposed upon me to see that the agreement was observed, ceased to operate. The resolution of 1925 has never been formally repealed, but in my view it has been in effect repealed.

After some years had passed something led me to re-examine what I call my agreements, that is the agreements with the Forestry Department of March 1926 and November 1926 to find out if I could what it was in them which Northmore was unable to understand. Everything seemed quite plain until I came to the important sub-clause 6 of clause 6 which provides for the division between the parties of the proceeds. To my amazement I could not understand it myself. I remembered that I had used the word "participants" and it was not in the clause. I traced the word back through several drafts which fortunately I had preserved and found that some wretched typist in the Crown Law Office had taken out the word "participants" and substituted for it the word "period" thereby making nonsense of the whole clause. To remedy what was so obviously a mere typist's error would have been a simple matter. But that was not done. Judge Northmore, like other craftsmen, rated his own work as much superior to that of Sir Walter James and Mr. Sayer, the Crown Solicitor, and what was practically a new agreement was signed 28/1/1933.

It is comforting to me to see that as drafted by Judge Northmore, the most important clause in the agreement, namely sub-clause (ii) of clause 6 providing for the division of proceeds does not differ materially from my sub-clause 6 of clause 6 of the 1926 agreement before a blundering typist put the word "period" where "participants" should have been.

The ever present danger to this great enterprise is that of fire. During the 20 years which have passed since the first planting only one fire has done much
damage. This was in the summer of 1929 as previously described. Considering the special features of the Western Australian summer, its long months with little or no rain, its periods of intense heat and strong dry winds, this immunity from fire over 20 years indicates a high standard of watchfulness and skill on the part of all the Forestry staff. So high does the fire hazard become at intervals during the summer months due to a conjunction of sun heat and dry, hot winds that few if any soft wood plantations in the world can be subject to such a risk. The plans and precautions designed and practised by the Forestry Department must be of a very high order.

So diligent and successful had the Forestry Department been in fulfilment of its contract that in 1940 it became advisable to slow down the rate of planting in order to retain on the job a sufficient labour force to deal with possible summer fires as explained in the following letter:

"Government of Western Australia,
Forests Department,
Perth,
6th November, 1940,

The Vice-Chancellor,
University of Western Australia,

"Dear Sir,

Applecross Pine Plantation

The agreement entered into between the University and this Department in connection with the Applecross Plantation provides that the Department plant at least 100 acres per annum. The Department has carried out its obligations until a stage has been reached when a continuation of work at the present will result in felling and firebreak clearing being completed in three years and planting in five years.

It is considered advisable to reduce the planting
"rate immediately in order to spread the associated
operations over a longer period, and thus keep a
greater number of men regularly employed on the
plantation. When the whole of the area has been planted
up, there may be an interval before the sale of logs from
thinnings is possible, and during this period the only
effective work requiring attention will be pruning 100
acres per annum at an estimated cost of £125, clearing
certain tracks, at an annual estimated cost of £10,
ploughing and cultivating firebreaks, at a labour cost
of £30, and some controlled burning, estimated to cost
£60 per annum.

These works, with a few maintenance jobs, will not
provide employment for the men it is considered desirable
to have available for fire protection in the summer
months, and I am satisfied that it will be in the
interests of both parties to reduce the planting rate
immediately to 50 acres per annum. If this proposal
meets with your approval, the men now employed on
clearing will be diverted forthwith to overdue pruning
and track clearing on an area of approximately 300
acres, and early attention to this work will have the
additional important advantage of reducing fire hazards
on the area referred to.

Yours faithfully,

(Signed) S.L. Kessell

Conservator of Forests.

The present (1946) position is as shown in the
figures kindly supplied by Mr. Stoate:-

Government of Western Australia,
Forests Department,
Perth, W.A.
14th August, 1946.

"Mr. W. Somerville,
"2 Albert Street,
"Normal Park."
"Dear Mr. Somerville,

I regret very much that the answer to your letter has been delayed but this was due to unavoidable circumstances, and owing to the fact that some of the information required by you was not available in Head Office.

Mr. Perry was very busy and was unable to prepare the information until yesterday.

The following particulars are submitted for your information:--

(1) Expenditure by Forests Department.

<table>
<thead>
<tr>
<th>Establishment and maintenance to 30th Sept., 1945</th>
<th>£31,032.1.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of Nursery site, Pt. Cockburn Sound Loc. 549</td>
<td>£653.14.1</td>
</tr>
<tr>
<td>Interest on Purchase cost</td>
<td>1,676.15.11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£34,362.11.1</strong></td>
</tr>
</tbody>
</table>

(2) Interest on Capital value of Land credited to University to 30/9/1945 9,514.12.0

(3) Total area planted | 1,596 ½ acres.

(4) Number of trees planted.

Approximately 900 to acre = 1,440,000.

The total area reserved for planting, is 2,274 acres and the position to date is:--

<table>
<thead>
<tr>
<th>Planted area</th>
<th>1596 ½ acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firebreaks, swamp and paddocks</td>
<td>386 ½</td>
</tr>
<tr>
<td>Area still to be planted</td>
<td>289</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,274 acres</strong></td>
</tr>
</tbody>
</table>

The agreement provided that so far as was possible 100 acres per annum should be planted.

The actual areas planted each year were as follows:

<table>
<thead>
<tr>
<th>1926</th>
<th>24 acres</th>
<th>1929</th>
<th>70 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1927</td>
<td>70 ½ &quot;</td>
<td>1930</td>
<td>117 &quot;</td>
</tr>
<tr>
<td>1928</td>
<td>85 ½ &quot;</td>
<td>1931</td>
<td>116 &quot;</td>
</tr>
<tr>
<td>Year</td>
<td>Acres</td>
<td>Year</td>
<td>Acres</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>1932</td>
<td>67(\frac{1}{2})</td>
<td>1939</td>
<td>103</td>
</tr>
<tr>
<td>1933</td>
<td>118(\frac{1}{2})</td>
<td>1940</td>
<td>76</td>
</tr>
<tr>
<td>1934</td>
<td>109</td>
<td>1941</td>
<td>33 7/10</td>
</tr>
<tr>
<td>1935</td>
<td>100</td>
<td>1942</td>
<td>49 8/10</td>
</tr>
<tr>
<td>1936</td>
<td>120</td>
<td>1943</td>
<td>63</td>
</tr>
<tr>
<td>1937</td>
<td>119(\frac{1}{2})</td>
<td>1944</td>
<td>17</td>
</tr>
<tr>
<td>1938</td>
<td>125</td>
<td>1945</td>
<td>17(\frac{1}{2})</td>
</tr>
</tbody>
</table>

The cost of establishing pines at this Plantation has averaged £11.16. 3d. per acre, and the annual maintenance cost has averaged 19/10d. per acre.

It was expected that planting would be completed in 1942, but owing to war caused shortage of manpower, and restricted Departmental expenditure, the programme has been interrupted but it is hoped to be able to complete the planting in the near future.

Yours faithfully,

(Signed) T.H. Steate

Conservator of Forests.

The harvest is due to begin in 1946. From that time on the University finances will, it is hoped and believed, benefit considerably by the sale of timber. It would be easy to wax eloquent about the possibilities, for the yield from other pine plantations in Australia has been high, but no good purpose would be served by such an attempt to see into the future. It is, however, as certain as anything can be in human affairs that, given a continuance of the same wise and efficient management and the skilled technical supervision which it has had up to the present, the Applecross Pine Plantation will go on yielding benefits to the University for an unforeseeable number of generations.

In 1924 Mr. Kessell estimated the planting costs at £10 per acre. He also anticipated that with practice this estimate might be reduced to £7. In view of the fact that costs for labour and materials have been constantly on the rise during the intervening 22 years it is evident that Mr. Kessell's original estimate was remarkably accurate.
The following letter was received by the Senate at its meeting in September, 1946:-

Government of Western Australia
Forests Department,
Perth.
5th September, 1946.

The Vice-Chancellor,
University of Western Australia,
Crawley.

Dear Sir,

It would seem appropriate if the Applecross Pine Plantation, which is not actually situated at Applecross, were re-named the Somerville Plantation in honour of Dr. W. Somerville.

Dr. Somerville was, I believe, the originator of the idea and was a member of the small group who first discussed in 1923 the possibilities of establishing this plantation.

Because he has always shown the keenest interest in the progress and development, the Department thought it would be a fitting gesture to have it known as the Somerville Plantation, if this should be in accordance with your wishes.

Yours faithfully,
(T.N. Stoate)
Conservator of Forests.

The Senate unanimously decided to approve of Mr. Stoate's suggestion.
In 1946 the yield of 40 year old Pinus Radiata grown at Penola in South Australia was 250 loads (50 cubic feet) per acre. This was being sold for 30/- per load at the stump.

If these figures are taken as a basis, with the yield per acre reduced to 220 loads per acre in consideration of the difference in variety and soil, an interesting calculation as to the possible yield from Applecross would be as follows:

According to a return furnished by the Conservator in August 1946 the accumulated credits to the respective participants were in round figures - Forestry Department £34,000 and the University £9,000.

220 loads at 30/- = £330 per acre. If 100 acres mature and are cut per year the yield will be £33,000 per year.

The Forestry Department's 34/43rds will yield approximately £26,000. The University's 9/43rds will yield £6,903 approximately. This can go on in perpetuity or until the land becomes too valuable for Forestry.

The above is not an estimate, it is merely a pleasant surmise or guess.