BOOK THREE

---000---

The Aftermath and

period from 1912

until the demolition

of the Observatory

---- o O o ----

CONTENTS

BOOK THREE:

| | | Page numbers | |
|-------|--|----------------------|--------------|
| 1. | The Immediate Aftermath | 172 - 181 | |
| 2. | The "Tech." and Amateurs | 182 - 188 | |
| 3. | The "Natal Association" Grows | 189 - 196 | |
| 4. | A Period of Doldrums | 197 - 203 | |
| 5. | DEMOLITION! | 204 - 208 | |
| 6. | Reminiscences | 209 - 213 | |
| 7. | To Close the Years to 1982 | 214 – 216 | Page numbers |
| Appen | dix 1. Items which are known and tho | ought to still exist | 217 |
| Appen | dix 2. List of Chairmen, Secretaries e | tc., from 1922 | 218 |
| | Index to Book Three | | |
| | | | |

THE IMMEDIATE AFTERMATH

Chapter One

1912 to 1917

I

On 16th March 1912, only two days after Nevill sailed from Durban and whilst he was still on board ship in South African waters, the newspaper, the "*Natal Mercury*" published the following article:

| "Durban's Observatory |
|-----------------------|
| to be closed down. |

"It is stated on good authority that the Union Government has decided to close down the Durban Observatory.

"Mr Nevill, who has, for so long been the Natal Astronomer, was recently granted a pension by the Government and retired, and it was an open secret that his position as Government Astronomer was to be filled by Mr Hodgson, the Senior Assistant, whose sudden death a few weeks back was so much regretted.

"Owing to his demise, there is no officer available to carry on with the work, with the result that it has been decided to close the Observatory down."

With this short article, the Natal Mercury broke the news to the public, and, as was expected, there was an outcry. This had no real effect on the outcome, but it brought attention to the fact that the major portion of the original cost of establishing the buildings and instruments had been met by public and private subscription and gifts. Therefore, Dr Innes (who had travelled down from Johannesburg to see to affairs) had to tread a somewhat careful path.

Innes had arrived some time previously and the whole matter of the Observatory's future had been aired, not only in the Press but also by members of the old Natal Legislative Council - particularly a stalwart friend of Nevill's, Senator Frank Churchill. However, the die had been cast and closure took place almost immediately accompanied by copious letters between Innes and the Union Government in the Transvaal. Fortunately, copies of these letters still exist and will be referred to in order to find out what happened to the various pieces of valuable equipment.

On the same day that the newspaper article had been published, Dr Innes wrote to the Secretary of the Interior advising him that on 15th March, he had formally taken charge of the Observatory

and had instructed Mr Jamieson to take temporary charge of the Government Laboratories, holding the post of "Acting Government Chemist". In this long letter, Innes listed out the work that had been conducted by the Observatory.

Under the heading of "Meteorology", he stated that: "The Meteorology for the Union is, I understand, to be under the control as from 1st April next (1912) of a Chief Meteorologist attached to the Department of Irrigation (Lands). Automatic records of the temperature (in an office) and pressure are with small instruments of the Richard type but are not reduced in any way. A new wind gauge is here but awaits erection. No sunshine records are obtained. There is a considerable stock of new instruments on hand. There are some instruments for determination of terrestrial magnetism in a magnetic house but it appears that observations are taken very irregularly."

On referring to Astronomy in his letter, he mentioned that the object glass of the 8 inch refractor "Cannot be seen at present for cobwebs which I was loath to destroy. There are some smaller

telescopes but the equipment is decidedly inferior and really useless for original research. Great pains have evidently been given to the time service and it gives general satisfaction to the town and port of Durban".

Innes then referred to the Tide Tables and advised that Nevill had taken all the tide data home with him and was presumably within his rights in doing so. A forecast of the tides for the year 1912 had been handed to the Durban Harbour Authorities.

After some other comments, Innes referred to the system of supplying time signals throughout the country at that time. For the, part of this letter is copied below *verbatim*:

"In the United Kingdom, time is determined at the Greenwich Observatory and from there sent to the Post Office, whence it is distributed as required upon payment of certain fees.

"This is undoubtedly the proper method, but it has not been followed in South Africa. The Cape Royal Observatory (Admiralty) sends a time signal at every hour which automatically sets the station clocks along the Cape Town - Simon's Town Railway, and the time signal sent at 10.00 a.m. (Greenwich Time) is distributed by a system of relays to Simon's Bay, Signal Hill, Docks Cape Town, Port Elizabeth and East London. A clock in the Harbour Tower at the Cape Town docks is also controlled by the Royal Observatory. No charge is made for any of these services.

"The Transvaal Observatory sends an hourly time signal to the Johannesburg Post Office and also telephones the correct time to several companies and individuals. No charge is made for the signals to the P.O. but the private signals are charged at the rate of 21/- a year for one message a week.

"The Natal Observatory emits the signal which drops the Time Ball on the Bluff, and it also sends hourly signals to the Port Captain and a clock is automatically controlled at the Post Office. No charge is made for these services. The Borough Electrical Engineer told me that when he applied to Nevill for an hourly time signal, Mr Nevill said 'Oh! I won't take any official cognisance of this; if Hodgson likes to fix up the thing, it is all right' - and this was done, so that the Corporation gets an hourly time-signal for nothing. The Electrical Engineer expressed his willingness to pay for this service, and rather liberally.

"It is beyond question that the Post Office would be the distributing agent of time and time signals, the Post Office obtaining the correct time from some Observatory, and the revenue derived from the sale of correct time should be collected by the post office."

Innes then detailed his propositions concerning the future of the Natal Observatory and advised that, as from 18th March, the Bluff time Ball would be worked direct from the Transvaal Observatory even though at first "there may be some failures until the new system is perfected". He intended to install one of the clocks then at the Natal Observatory in the Durban Post Office - a matter which the Postal authorities were delighted about. Innes wound up his eight page letter with the following remarks:

"I am prepared to close the Natal Observatory by the 31st March and this will leave over the question of Mr Meldrum's services. I beg to suggest that he be transferred to the staff of the new meteorological department.

"Disposal of the equipment of the Natal Observatory:

"The 8" refractor was paid for by public subscription in Durban {Incorrect-it was paid for by Mr Harry Escombe - Ed.} and I propose that you should offer it to the Durban Corporation, together with so much of its building as would pay to remove, so that Corporation can re-erect the instrument where it could be used for educational purposes.

"Some small portion of the remainder of the equipment and some of the library might be transferred to the Transvaal Observatory, and the meteorological equipment can be retained for disposal by the new meteorological department. There will still remain an odd assortment of instruments (not of much value) and books which could be sold or otherwise disposed of Then the Observatory being closed, the residence and the present astronomical buildings could be handed over for the use of the Government Laboratories, to be used chiefly as quarters for the staff on payment of rent."

It appeared that Mr Jamieson was married with several children and that the Press would not over-react as long as the 8-inch refractor and the Laboratories were to be handed over to Durban and the Government respectively. A valuation of the main observatory at £800 and the remaining building at £1 050 was submitted and a letter dated 22nd March was sent advising that Mr Young - Controller of Telegraphs - was now in charge of the Kullberg Mean Time clock. This had been transferred to the Post Office.

Dr Innes left for the Transvaal on March 22^{nd} . Mr C M Hull was in charge of the Observatory whilst Dr McCrae was the Government Chemist for the area.

Mr Shaw of the Department of the Interior wrote to Innes on 29th March summarising the details of the disposal of the various goods. "I have represented the question of Time Service to the Postmaster General, the tide services to the General Manager of the Railways, the question of the transfer of the two acres of land to the Lands Department; Mr Nevill's claim for compensation to the Finance Department; the question of the disposal of the telescope and equipment is being considered by the Minister". He continued:

"There will be no objection to your packing up and sending to the Transvaal Observatory so much of the scientific instruments, books and furniture as will be useful there. The redundant, obsolete and worn out Astronomical instruments should be packed together and handed to Mr Jamieson, who should keep them until final instructions as to the disposal thereof can be given him. The meteorological instruments should be carefully packed and handed over in due course. With regards to the library, I shall be glad if you will let Jamieson see the books and take what he wants. Then, Dr Haydon, Assistant Medical Officer of Health for the Union at Durban and Dr Park Ross might be asked to take what they would like." ²

The outcome of the break-up of the Library was that most of the better books were packed and sent off to the Union Observatory in Johannesburg. Mr Jamieson took the copy of the Encyclopaedia Britannica and Dr Haydon took the "Penny Cyclopedia". The remaining books were offered to the Durban Library after the Department of Health had taken its pick of the scientific volumes. Nevill's private collection, so carefully put together over thirty years, was thus totally dismantled.

The Johannesburg Government Laboratories acknowledged receipt of the volumes of: "Nature Knowledge", "Philosophical Transactions", "Proceedings of the Royal Society", "Royal Society Reports" and Crelle's Calculating Tables - numbering two or three hundred volumes. Virtually none of these remain today.

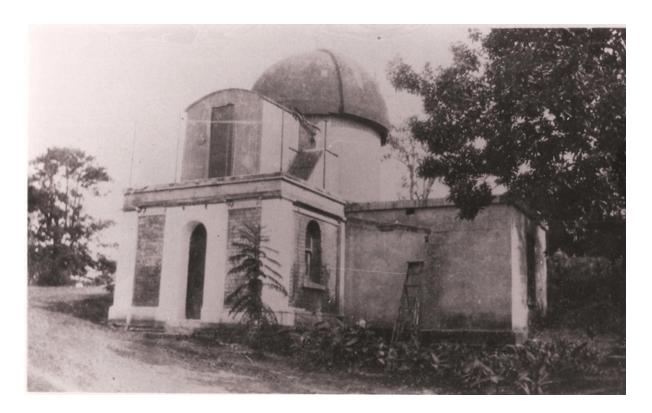
Nevill's claim for compensation came under discussion once more, with departmental Minutes going back and forth during April. Nothing was finalised, but on 26th April, a reassessment of the values of the various items was made, namely: Instruments £75, Laboratory £330, Furniture £57.10/-, Dwelling House £135 {!!}, Main building £400, giving a total of £997.10/-. It was then recommended to stick to the 30th April agreed amount of £600 for reimbursement to Nevill. The matter rested there and we have no proof that this money was sent overseas to the retired Astronomer. In fact, his eldest daughter Maud insisted that Nevill never received payment in compensation for his personal losses.

After a further check on 6th May 1912, Innes wrote to the Department of the Interior advising that the Observatory had been finally closed.

A few days later, on 11th May, a letter from the Department of the Interior to Innes states that "a formal offer of the telescope was made by the Government to the Municipality of Durban on 2nd inst. and was accepted on the 8th instant." Two days later, reference was again made to the offer of the remaining astronomical books to the Durban Library.

The Transit Instrument was removed from its iron bedplate during May and stored by the Public Works department. The bedplate itself was removed and sent to Johannesburg.

The idea of transferring the Observatory's two acres of land back to the Durban Corporation was dropped as this would have meant a complete reconstruction of the set of Laboratories. The books referred to above were formally accepted by Durban's Town Clerk on 21st June and transferred to the Library on 12th July, but despite a thorough search by the author, they all appear to have vanished.



The Durban Obsrvatory, circa 1920. Courtesy Mr. I. R. James, Kloof, Natal.

 \mathbf{II}

On 22nd July, Innes sent a letter from Professor Roseveare of the Natal University College in Pietermaritzburg to the Secretary for the Interior. Living at 277 Burger Street in Pietermaritzburg, the Professor had formally applied for the 4" refractor (the "Watson") and fittings. Innes recommended that he be allowed to take these over and this was agreed to. The telescope, its fittings and the shed which contained them were duly transported to Pietermaritzburg and erected in the grounds of the College. The two cases of equipment involved contained the following items: the 4-inch telescope, 1 terrestrial eyepiece, 3 astronomical eyepieces, 1 sun glass, 1 star diagonal, 1 dewcap, 1 handle for slow motion and one complete equatorial head. ¹

Mayoral Minute No 38 from the then Mayor of Durban, Councillor F C Hollander J.P., to his Council before the close of July 1912 reads :

Gift of Astronomical Telescope

Consequent upon the decision of the Government yo discontinue the Government Observatory in Durban, the Minister of the Interior enquired whether the Municipality would be prepared to accept the gift of the 8-inch telescope and revolving dome now forming part of the Observatory equipment situated within the Botanic Garden area. You readily accepted this liberal offer, and as there is a probability of our acquiring the Observatory site, I hope arrangements will be made to retain the telescope in its present position and to utilise the site as a 'view point' instead of acquiring some other site where the surroundings could not be so attractive.

A further reference to this transaction appears in Council Minutes as follows:

No. 304. Gift of Astronomical Plant:

"No 64.392, Acting Under Secretary for the Interior, dated 2nd May 1912, enquiring whether the Municipality of Durban would be prepared to accept the gift of the 8-inch telescope and revolving dome now forming part of the Observatory equipment in Durban.

"Resolved: That the offer be accepted and that the thanks of this Council be conveyed to the Minister of the Interior."

It was in this manner that "ownership" of the Grubb refractor, the gift of The Hon. Harry Escombe in 1882 at a cost of £600 passed to the hands of the Durban Council

Slight consternation was caused when it was then discovered that Jamieson had, without permission, installed himself and his family in Nevill's original home as early as 1st April - only days after Nevill had left. Furthermore, Messrs Stewart, Meldrum and Tonkin of the Meteorological and Chemical staff had deposited their belongings in the house and had made themselves perfectly "at home"! No rent was being paid and this caused some upset in official quarters. The final outcome is unknown.

What of the Grubb refractor? It appears that the Council was "in no hurry" to take responsibility for the instrument but action had to be taken after a stinging letter had been

received from the Department of the Interior about the matter. On 10th June, the Council wrote to the Secretary of the Interior advising that ... "the Borough Engineer has been instructed to take such steps as may be necessary for the protection of the telescope "..... The Engineer apparently sent someone up to the site every so often to check its condition but certainly the telescope was not used. The canvas covered dome was deteriorating rapidly. Little if anything was done and certainly everything stopped completely when the first Great War broke out in 1914.

The last information available in 1912 is a notice that on 3rd October 1912, a Mr D Gordon-Mills formed in Cape Town what became the "Astronomical Society of Southern Africa" with an initial membership of sixty-one persons. This body has continued from strength to strength to this day and was the direct fore-runner of the local "Centres" that came into being around the country.

Ш

On 30th April 1915, Innes wrote a letter to Prof. Roseveare stating that he was pleased that the 4-inch refractor was giving pleasure in Pietermaritzburg and asking what "has become of the 8-inch Grubb in Durban", suggesting that if it was not being used, he - Roseveare - would be the right person to use it.

This caused Roseveare to visit Durban to inspect the instrument but there is no record of his findings. However, the matter did not rest there as in November 1915 he raised it again. Roseveare had inspected the instrument and he reported to Innes that:

"..... I had a good time with it one week-end - I find two of the Tech. Institute teachers are keen on it but have no knowledge of astronomy. The clockwork and electric lighting are out of order and the inside is very dirty. One of the two men is an electrical engineer and may, by New Year have restored the lights and the clockwork and removed the heavy coatings of Vaseline, but if YOU could look at it, we would all rejoice. I mean to go down again as soon as I am free. My Survey Department friend will come too and I expect he will be able to do some good work with it.

I am not without hope of getting more Durban people interested - but a visit from 'Your Loftiness' would be worth all our local struggles. Our efforts to galvanise the S.A.A.A.S. in Natal are rather hopeful''

The apparent lack of action by the Durban Municipality caused Roseveare to advise Innes on 14th January 1916 that it appeared that the control of the 8-inch telescope (and the Observatory) was slowly passing to the Durban Technical Institute. He proposed, with the consent of the Institute and with the assistance of the Geodetic Surveyor in the Surveyor General's Department to "overhaul the 8-inch. I have cleaned the objective and we have no fear of doing any damage". Work started on 18th January but there is no mention of progress made. However "good views of Mars and Jupiter" had been seen after some adjustment to the Right Ascension setting circle.

In July 1916, the S.A. Association for the Advancement of Science met in Durban and Pietermaritzburg. Innes was present at these meetings. Roseveare had obviously done some good work on the Grubb refractor as a letter of appreciation was sent to him by Innes.

The next small item which appears in the records of those meetings was a reference from Cape Town which apparently recommended resolutions on "Metric Systems and Daylight Saving". Innes strongly objected to this and asked Roseveare if he would write to Cape Town accordingly. The matter of daylight saving has been a thorny issue ever since, and of course we have succumbed to the metric system during the past few years.....

IV

We now come to the first of many letters on file from the Technical Institute (now the Natal Technikon) and are grateful to them for access to their Minute Books for many of the references that appear therein concerning the Observatory. This letter is dated 23rd August 1916 and was signed by the then Principal Mr B Narbeth and concerned the future of the Grubb refractor. On 28th September, Narbeth wrote to Innes advising that the Town Council had written to him (Narbeth) concerning the state of the telescope. He stated that ..."The way has thus been opened, I think, for us to get the Council to make some special effort in the direction of getting the the instrument back to its former condition as it was when Mr Nevill left it"...¹

Roseveare was in on the action right from the start and, whilst visiting the Oaks At Byrne (see page 1, where our story started with the McLeod family) on 15th November 1916 he wrote stating that he was giving a lecture in Greytown and wanted to borrow a box of slides for this purpose. ... "I am inclined to think that the lack of energy on the part of the Tech. is more cautious than the Town Council's gallic attitude. If the Scientific people would show

more interest, the Council could easily be coerced, I think. Of course I can only get an evening there very occasionally, and last time I failed to meet my new enthusiast *Mr Wickes* but have corresponded since" ² This is the first reference to a man who was to make all the difference to Astronomy on the amateur level in Durban. He was to set up a local astronomical society and keep it going for many a year.

On 3rd January 1917, a formal letter was sent to the Mayor of Durban suggesting that the Council consider removing the telescope and re-erecting it in the north-east corner of the Berea Park where a "suitable pavilion could be erected to house it and make it available to the public". This brought a reaction from Narbeth who pointed out that considerable work and expense had been devoted to the instrument. No reply is found in the files.

The Troughton and Simms Transit telescope had been quietly removed to the Transvaal some time before "for safe keeping" and after a request by the Tech. for such an instrument, it was returned and arrived in Durban in its box on 14th April 1917. One of the chronometers (the Frodsham No 1888) which had been loaned to the Post Office was also returned to the Institute at about the same time. It was also around this time that the Council finally relinquished control of the Grubb refractor and the the old Observatory building. Mayoral Minutes of July 1917, pages 30 and 31 state:

"The Observatory Telescope"

"When in 1912 the Union Government expressed its intention of closing the Natal Observatory as regards its astronomical work, the Council was offered the astronomical telescope. The offer was accepted but nothing was done in the way of making it of any use, and recently the Union Astronomer {Innes} made representation to us in regard to it. He suggested that if the Council had no use for the instrument, it might, with advantage be handed over to the Durban Technical College or the Natal University College. The Council immediately got in touch with the authorities of the Technical College and gave them the first chance of refusal. Certain conditions were imposed with the gift, and these the Council of the College readily accepted.

"Among other things, they promise to provide suitable accommodation as soon as possible, to make arrangement for public demonstrations and lecturers in connection with the telescope, while they further express their intention of undertaking a considerable amount of renovation work in connection with the instrument itself, and generally to secure (sic.) that the telescope shall be put to some practical use. There is every prospect that the science of astronomy

will receive a considerable impetus locally by the action of the Technical College in this matter.³

It might be wise to reflect on the Council's attitude in those times. Firstly, on being offered the Grubb telescope as a "gift", they jumped at the chance but there was nobody on the Council who had any real knowledge of how to use it or even of astronomy as a science. It must have become somewhat of an expensive embarrassment to them but, quite sensibly, they did *not* want to see it being removed to the Transvaal. The offer to the Technical College and their acceptance of it must have come as a blessing as it and the Observatory were both now in someone else's hands.

At the end of 1917, the Transit telescope was back in Durban together with the Transit instrument. The Kullberg Mean Time clock was at the Durban Post Office, the Watson 4-inch refractor was safely in Pietermaritzburg, the Frodsham chronometer (originally used to time the Transit of Venus in 1882) was in the hands of the Durban Technical College, some of Nevill's books were in the Durban Library for safekeeping with the remainder of his library partly in Johannesburg and the remainder split up all over the country. The Meteorological instruments had been disposed of and the old Observatory building containing the Grubb refractor still remained on the Berea - albeit in a somewhat battered and bruised condition.

*

REFERENCES AND SOURCES

-----o 0 o -----

Section I:

- 1. Letters Innes to Department of Interior, 16/3/1912, CSIR and Local History Museum
 - 2. Letters, Shaw to Innes, 29/3/1912, CSIR and Local History Museum

| 3. Vide 2 supra, 11/5/1912. |
|--|
| Section II: |
| 1. Mayoral Minute 38, page 23, 1912 Municipal Archives, Durban & L.H.M. |
| 2. Letters - Roseveare to Innes, 8/11/1915, CSIR, L.H.M. & University of Natal |
| Section III: |
| Letters - Narbeth to Innes, 28/9/1916, CSIR, L.H.M. University of Natal and Natal Technical College. |
| 2. Letters - Roseveare to Innes - 15/11/1916, CSIR, L.H.M. & University of Natal |
| 3. Mayoral Minute No 33, page 30, July 1917 - Municipal Archives Durban and Local History Museum |
| |
| N.B. "L.H.M." refers to "Local History Museum, Durban" |

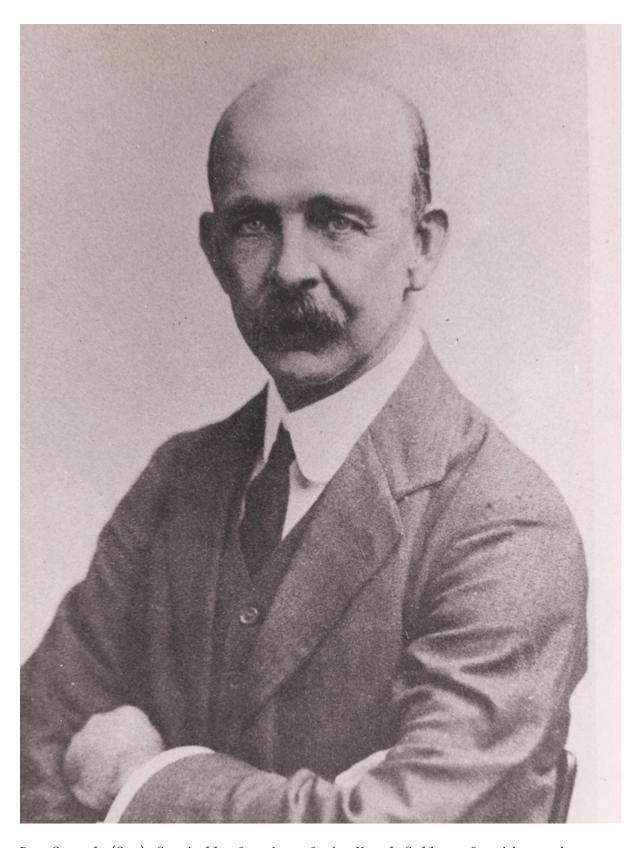
| | | - | - | - | - | - | o | 0 | o | - | - | - | - | - | - | - | - |
|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

THE 'TECH.' AND AMATEURS

| CHAPTER TWO |
|-------------|
| |
| 1017 1022 |
| 1917 - 1922 |

Ī

A few years before Nevill left for England, Dr Sam Campbell of Durban decided that there was a great need for some form of tertiary education for young people in Durban. He was instrumental in 1907 in starting up what was originally the Natal Technical Institution - a body which eventually became the Natal Technical College and latterly the "Technikon". The history of this fine body has been well researched by Mr Wyn Rees M.A. (Wales) whose book "Natal Technical College - 1907 - 1957" was published by the University of Natal Press in 1957.



Dr. Samuel (Sam) Campbell, founder of the Natal College for Advanced Technical Education and President of the first "Society of Amateur Astronomers" in 1922.

Courtesy Dr. Hamish Campbell, Durban

The early Institute suffered the same problem as the old Observatory - severe lack of funds. All Government subsidies fell away when the Natal Government gave way to the Union Government. In order to gain assistance from the latter, Dr Sam Campbell decided that the Institute should be properly housed in a building suitable for the work being carried out and invited the Duke of Connaught to lay the foundation stone when he visited Durban in 1911. The duke agreed to do this and the Union Government was stung into action to provide the necessary support. The fine building situated at the West end of West and Smith Streets was completed in 1912 just after Nevill had sailed from Durban.

As mentioned in the previous chapter, control of the Observatory had been handed to the Institute and their Council Minutes in 1913 indicate that positive interest in the old place had been awakened. However it was not until 15th December 1915 that a "Mr Clark proposed the formation of a 'Society for the Advancement of Arts and Sciences' to which Council agreed".¹

With some assistance from Innes in Johannesburg, Prof. Roseveare and Council started to collaborate. Roseveare spent £1:2:6d in putting the telescope into good working order. He was reimbursed by the Council who thanked him for his efforts ² In October 1916, the Council appointed Messrs. Buzzard & Clark, (Department of Physics) and Short (Arts Department) to create a sub-Committee to liaise with Prof. Roseveare concerning the possible re-siting of the large telescope and its accessories.³ As is known, this matter was dropped and the instrument stayed in the old Observatory.

The sub-Committee got down to work and on 27th February 1917 presented a full report to the Council, coming up with some findings, *inter alia*:

"The Committee found that certain members of the Staff of the College with Professor Roseveare and his friend Mr Schriber (Surveyor) had done all that could be done towards putting the instrument in order without incurring

considerable financial expenditure. The most urgent requirements are:

1) That the clockwork be dismantled and cleaned

2) That [a] transformer (originally removed by the P.W.D.) Be purchased to enable the scale reading lamps to be used

These two items are of extreme importance.

3) That the following are very necessary to put the Observatory into working order:-

One 3" equatorial telescope

One Chronometer

Two step-ladders

One or two good star atlases

One photographic attachment.

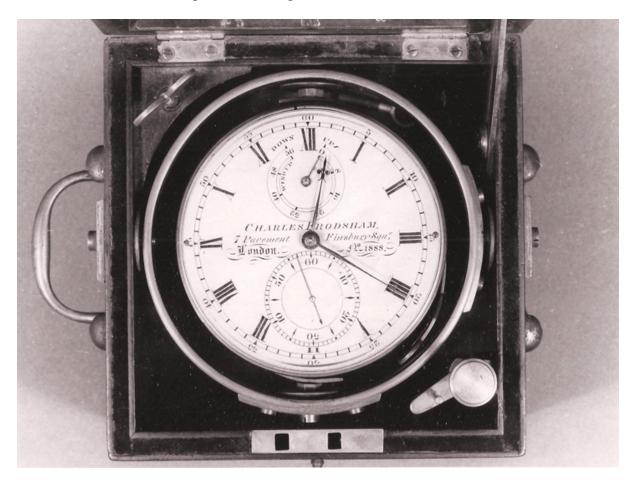
In addition, extra balance weights are required for the instrument, a leak in the roof requires repairing, certain ant-eaten woodwork requires replacing

(and so on) ending with: It was suggested that the formation of an **Astronomical Section of the Natal Society for the Advancement of Science and Art** which had been talked of for nearly a year, might do much towards stimulating interest in Astronomy." ⁴

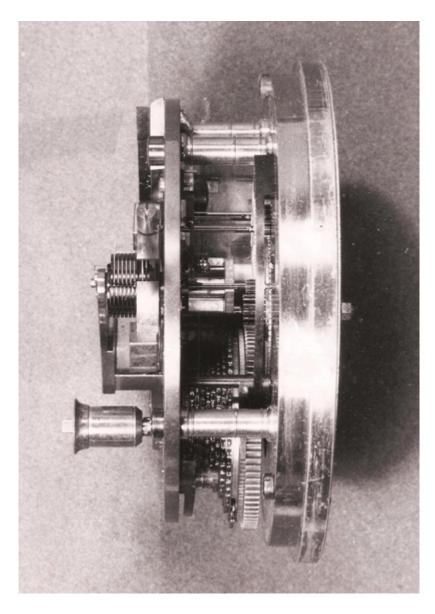
Members of the present Natal Centre of A.S.S.A., will see in this the first move towards the formation of a Society for amateur Astronomers.

Mr Clark was the driving force in the sub-Committee and on 10th April 1917, Dr Innes wrote to the Council advising them that he had handed over the Transit telescope to Mr Clark on a loan basis until he (Innes) had received permission from the Union Government to present it to the Institute. He also advised that on 23rd April he had asked the Durban Post-master to hand over the Frodsham Chronometer to the Institute. Council Minutes noted that Mr Clark now had this chronometer in his room, where some sixty years later on Monday 10th January 1977, the author discovered it in what is now the office of the Deputy Director! It was in

good order and after ministrations of checking and cleaning by a local watchmaker, it was overhauled and returned in perfect working condition.



The "Charles Frodsham" Chronometer, used to time the Transit of Venus in 1882. Recovered from the Natal Technical College in 1977. Courtesy of the Local History Museum



The inner workings of the "Frodsham" chronometer No. 1888 Courtesy of the Local History Museum.

Returning to the Transit instrument, it appears that Mr Clark had been up to Johannesburg, had collected it from Innes and, at a cost of £1:15:0d including an extra seat in the train and the taxi fare, had brought it back to Durban.⁵ A new iron bedplate was fabricated for it and it was re-installed in the Observatory.

On 6th March 1917, the Durban Town Clerk had sent a latter to the Institute advising that the Town Council had decided to hand over the care of the Grubb 8" refractor to them, including the words that "... it is utilised and instruction of the burgesses of Durban and *properly looked after*." (Author's emphasis). This was a slight dig at the Institute as the Town Council had certainly not been able to look after it properly themselves. As we know, the offer was accepted and on 12th June 1917, a working Committee comprising Mr Short, Mr Clark, Mr Pullin and a Mr Wicks - of whom more later - be appointed to have charge of the building and its contents.

Mr Wicks was a young and enthusiastic man who had already spent much time at the Observatory and was indeed to spend decades of his life to the advancement of Astronomy in Durban.

The next meeting of the Observatory Committee took place on $23^{\rm rd}$ March 1918 in the Observatory itself. Nothing had as yet been done about the ladders, star atlases etc., but the Transit had been re-installed, requiring some adjustments and final bolting down on its new bed-plate. Ninety minutes later, the meeting was closed with a further meeting to take place with an inspection twelve days later. This did not happen and the next meeting only took place three years later in 1921. The delay was caused by the cessation of hostilities in 1918 and the flood of returning soldiers, all of whom had to be rehabilitated. Many of these had to be re-trained and the Institute was hard pressed to keep up with its normal work.

In November 1921 the Observatory Committee was reconvened and comprised Mr W Fox (Chairman), Mr E Halm (Secretary) and Messrs. Buchanan, Clark, Pullin and the Principal. Mr Wicks had repaired the clockwork unit, a star atlas had been obtained and work had to be completed on setting up the Transit instrument. The Government Entomologist Mr Van der Merwe was asked to hand over the keys of the Observatory as he would no longer require them and, finally, a letter from a Mr H E Wood of the Johannesburg Observatory was read out to all present. This stated that "..... this Committee should take the initiative in the formation of a Durban Astronomical Association....."

On 9th December 1921 the Committee met once more and Mr Forbes was a new name present. Like Mr Wicks, he was to prove invaluable in the near future. It was at this meeting that the Committee was informed that the Institute (now the "College") Council had agreed to the formation of the "Durban Astronomical Association". The Committee Secretary was instructed to write to the Cape Astronomical Association and obtain a copy of its rules. An approach was made to the Town Council for a grant-in-aid of £100 to assist the Committee in its work.

Mr Buchanan had supplied the Committee with a list of all the books on Astronomy that then existed in the Durban Library and one wonders if any of Nevill's own books were noted on that list. Two days later, the Committee met again and listed the practical matters that required attention such as, paint for the telescope, whitewash for the roof, a handle for turning the dome, a key for the wheel and rope turning attachments.³ No doubt these were attended to.

Ш

Going back to some earlier correspondence, we find that a Dr Lindsay Johnson of the Britannia Buildings (now demolished) wrote on 29th April 1919 to Dr Innes that as he was returning to "Blighty", he might be able assist by purchasing any optical items that he (Innes) might require. Innes was delighted and advised that he would be contacted, also mentioning that "Grubb's" (The telescope makers) were quite unable "at this time" to undertake any serious work.

Mr Hugh Clark wrote to Innes on 25th July advising that he was going for five month's study leave overseas and mentioned that "Mr Wicks has taken some very good photographs of the Moon and of the solar eclipse last June. The clock has been dismantled and some of the bearings re-bushed. Dew caps have been made for the lenses and with a larger staff and the possibilities of less evening teaching, the staff should be able to do quite a lot to popularise astronomy. Mr T C Pullin gave a series of lectures in and around Durban but we have all been handicapped by the effects of the war on the staffing". ¹

At this stage, radio was still in its infancy. In 1922 Innes wrote to the Admiralty Wireless Station asking if they were emitting time signals. The reply came from Pietermaritzburg that no signals were being sent from the station at Jacobs. ² The gap of three years would indicate that scientific work had come to a virtual standstill. However in 1922, a Mr A G Hoyer - a Durban Engineer and Broker, wrote to Mr Halm (Secretary of the Observatory Committee) enclosing a set of the Cape Astronomical Association rules. In his letter, he mentioned Innes'

support for the formation of a local Society. That he was well versed in astronomical matters is obvious for he wrote to Innes two days later enclosing a series of astronomical calculations and co-ordinates, mentioning that the Society was about to be formed.²

Both local newspapers, the Natal Mercury and The Advertiser gave good coverage to the formation of the Association. On Monday 22nd March 1922, the Mercury reported as follows:

THE CURRIE ROAD TELESCOPE : PROPOSED ASTRONOMICAL SOCIETY

We are glad to learn that the labours of the Observatory Committee of the Technical College have borne fruit. Within the past two months, the Observatory premises have been thoroughly cleansed and put in sound condition after ten years neglect. The telescope and its equipment have received careful attention from experts and the many minor wants in connection therewith have been supplied through the kindness of the College Council.

The Committee now desires to bring together all those who are interested in Astronomy with the view of forming a live Astronomical Society. The opportunity of having the use of a telescope of the power of the Durban one is denied to most places and it is up to the local students of the heavens to back

up the Observatory Committee. The Observatory and its maintenance will remain in the hands of the College Committee and in consequence, the expenses of the new Society will now involve more than a nominal annual subscription. The aim of the Committee is to extend in every way the usefulness of the valuable property now in their care.

Will all willing to become associated with the new Society kindly send their names to Mr H G Halm, Hon. Secretary, Observatory Committee, Technical College, Durban. This should be done as soon as possible³

The Committee Minutes reflect that a great deal of tidying up had been carried out - mainly by the Chairman and Secretary, to pave the way for the above article. The Committee met again on 3rd April and set out final plans for formation of the Society. Certain rules were formalised in that : 1) All applications for the use of the instrument are to be made to this Committee, 2) A responsible person to be present when the instrument is being used, 3) the Society to pay an annual fee of one guinea for the use of the instrument and, 4) The College Council to have the right to nominate two members of the Committee to the Society" ⁴

The meeting to form the local Society took place on 8th May 1922 and the Natal Advertiser presented the following report :

STAR STUDY - ASTRONOMY IN DURBAN - SOCIETY FORMED

A very profitable hour was spent last evening in the main hall of the Technical College, where some forty astronomical enthusiasts gathered and formed themselves into what will probably become known as the Natal Amateur Astronomical Association.

The idea of extending the scope to the whole of Natal rather than confining it to Durban alone emanated from the Chairman of the Observatory Advisory Board, Mr Fox, who presided over the evening's proceedings, and who thought the appeal should be made to the whole of Natal - a proposition which received the support of others of the Meeting.

Mr Fox also treated the gathering to a short address, in which a few of the first steps in astronomy were outlined, such as the distance in light years of the nearest fixed star, the planets now visible in the heavens at night, and he pointed out in addition that the proposed society was to have the advantage of the telescope in Currie Road, which had been purchased and erected by the late Harry Escombe, and which was a really good instrument for all ordinary purposes. It was erected in 1882 to observe the transit of Venus and since then had not been largely used, but it was hoped now to put it into

practical use for the benefit of a number of amateur students. In this way it would become an educational asset. He assured the meeting that the Council was intensely interested in the movement and hoped for its full success.

Kindred Societies

The Secretary to the Committee, Mr Halm, also gave some valuable information regarding the proposed society, pointing out what was done at Cape Town and Johannesburg, where societies had been flourishing for years. These centres had the advantage of professionals to teach the amateurs, but the Natal Society would have to help itself and look to its own members for papers and lectures. It was hoped however that great strides would be made. ⁵

A few days later, the Natal Mercury reported on the meeting, mentioning that between fifty and sixty persons had been present. They also mentioned that several people took part in the discussion, some of these being Dr Sam Campbell, Rev. Mr James, Mr Champion, Mr Forbes, Mr Hoyer, Mr H Clark and Miss Coates. "The meeting terminated with a very hearty vote of thanks to the Chairman." ⁶

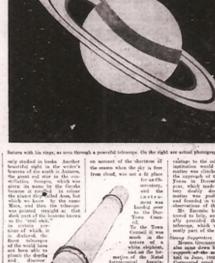
Thus the Amateur Society was formed and on 19th May, Messrs Buchanan and Fox were officially appointed to represent the College Council. Three days later Dr Sam Campbell - Founder of the Technical College was elected as its first President. Mr Fox resigned as Chairman and was re-elected as Vice President. He acted as the Chairman for most of the future meetings.

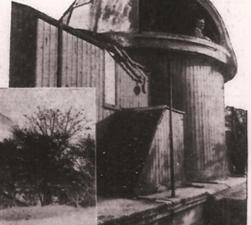
The foundations of the first of various Astronomical Societies of Natal had been well and truly laid and a long run of years lay ahead of it before it foundered and was replaced by different societies with identical aims.

OF MILES THROUGH SPACE **MILLIONS**

Star-Gazing in Durban: The Work of the Astronomical

Society





Natal Advertiser Saturday 21 July1956.

SOURCES AND REFERENCES Most of the following references have been taken from the Minute Books of the Council of the Natal Technical College and will be referred to as "NCT" hereunder. The Local History Museum in Durban is referred to as "LHM". **Section I:**

- 1. 17th December 1915, Page 5 NCT & LHM.
- 2. 13th March 1916, NCT & LHM Durban
- 3. October 1916, page 159 NCT & LHM
- 4. 26th February 1917, pp. 34/5 NCT & LHM
- 5. 23rd April 1917, Appendix (Report) NCT & LHM

Section II:

- 1. 23rd March 1918, page 66 NCT & LHM
 - 2. 3rd November 1921, pages 362 & 363 NCT & LHM
 - 3. 11th December 1921, page 394 NCT and LHM

Section III:

- 1. Letters. Clark to Innes, 25th July 1919 LHM and CSIR
 - 2. Letters, Hoyer to Innes, 27th February 1922 LHM & CSIR
 - 3. Natal Mercury Monday 27th March 1922, page 8 Microfilm, Don Africana Library, Durban, NCT & LHM
 - 4. 20th March 1922 page 99 of Minutes NCT & LHM
 - 5. The Natal Advertiser, Tuesday 9th May 1922, page 3, Microfilm, Don Africana, NCT & LHM
 - 6. The Natal Mercury, Saturday 13th May 1922, page 14, ibid.

| - | _ | _ | _ | _ | _ | _ | _ | o | 0 | o | _ | _ | _ | _ | _ | _ | _ | _ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

THE NATAL ASSOCIATION GROWS

| CHAPTER THREE |
|---------------|
| |
| |
| 1922 - 1930 |
| |

I

With its inception on 8th May 1922, the Natal Astronomical Association started a long and fruitful existence with the blessing of the Technical College Council, the Press and the public at large. The Observatory and its instruments were now in the capable hands of people who were keen amateurs and had an abiding love for beautifully made instruments. The election of Dr "Sam" Campbell as President ensured this. The members kept very close ties with the Council, especially as two of its members were also Council members.

By studying many of the Council Minutes and also those of the Association together with those of the Astronomical Society of Southern Africa in Cape Town (or "A.S.S.A." as it has become known) it is possible to flesh out the progress that was made.

On 25th September 1922, the Observatory Committee met with Mr Fox in the Chair, Mr Forbes (Acting Principal of the College), Mr Clark and Mr Halm (Secretary) all being present. Dr S G Campbell's election as President was recorded and the membership stood at seventy-five. Four

meetings had already taken place at which Dr Campbell, Prof. Roseveare of Pietermaritzburg and Messrs. Forbes and Clark had given lectures. Average attendance at these had been about forty persons. Mr Forbes has also written advising that he had firm evidence that the

Observatory had been broken into and that one of the eyepieces had been stolen. As a result of this, all keys to the building, other than those belonging to the Committee, were to be collected up, suitable notices were to be erected, all those using the telescope were to sign a book, a complete inventory of the contents was to be made, all steps possible were to be taken to prevent unauthorised entry, valuable eyepieces were to be locked in a box screwed to the floor and so forth. A Mr Blenner -Hasset had offered to overhaul the clockwork and also the lighting system for the telescope.

As a result of a letter from a Mr Wood of the Union Observatory (Johannesburg) mentioning the need for school-children to be able to visit the observatory, a start had been made to accommodate this. Parties of boys and girls together with a class from the Technical College had already been to the site. Arrangements for visits by the public would, however have to wait while details were worked out.¹

A few days later (October 20th) Mr Fox asked permission to place on the Library Tables, the periodical known as "The Observatory" as well as others, also to purchase other publications from time to time, and requested that Association members might be granted permission to consult any works on astronomy existing in the library. Both requests were granted.²

The earliest Annual Report of the Association, that for the years 1923/4 contains items concerning the Observatory during the period from October 1922 found in the various Minutes - but this detailed the work done for the period. Extracts of this lengthy Report show that:

......" Regular monthly meetings have been held except in July and January, these being 'holiday' months. Most meetings were held on Thursdays but this was changed to Tuesdays by popular request. During the year, the following papers were read:

August Mr J B Mumford Astronomy in the 17th century

September Mr C F Wickes Observatory night

October Mr H E Wood The New Heavens

November Prof. Roseveare Astronomy & Human Thought

December Mr J C Pullin The Moon

Mr J B Mumford Suns and Dartars [sic.]

February '23 Dr Wynne Westcott Time and Space

March Mr J B Chalmers Gleanings

Mr S W Peachey The Moon

April Mr L J Landau Origin & evolution of the Solar system

May (at Obs.) Mr F T Fox Viewing Saturn with Mr Wickes viewing Neptune and Jupiter and Mr G A Champion viewing Mars.

Mr Wood had come down from Johannesburg to lecture and the Association was deeply grateful to him for this. Prof. Roseveare was also a keen visitor from Pietermaritzburg and he was also warmly thanked. For some of the lectures, the "Arthur Smith Hall" at the college had been made available. The lecture by Mr Wood had been extremely well attended.

As the President could not attend these meetings, Mr G A Champion 'proved to be a vary capable substitute'. Mr Halms (Secretary) had met up with Dr Innes and had explained what the Association was doing. Both Dr Innes and Mr Wood (Chief Assistant at the Union Observatory) and the former had sent down a complete set of the Observatory publications since Union with a promise of future publications. Membership had settled down to about 88.

Dr Moir of Johannesburg (in charge of observations of the planet Mars during its present closest approach) had asked Messrs Forbes and Wickes if he - Moir - could take observations in Durban. The number of privately owned telescopes had increased and 'we rejoice thereat'. The 8" refractor is not ready for systematic observations and work is being carried with smaller instruments.

A Visitor's Book had been donated by Mr Buchanan and thanks are given to

Dr Park Ross and Dr Kirkness for making arrangements for the two meetings at the Observatory.³

So in part, reads the Minutes of the A.G.M. in 1924. On practical matters, the dome had been leaking (a perennial problem!) and had been repaired at a cost of £7:3: 6d, the clockwork had once again been overhauled and Dr Innes had suggested that the telescope be re-sited at the new Natal University high on the Berea. This latter suggestion was not carried out. If it had, the venerable 8" Grubb refractor might still be in use today.......

Mr A Buchanan and Mr W Fox were re-elected as Council representatives for the year 1924 to 1925,⁴ but the latter's tenure was not to last long for he went to London and on 9th November he wrote that he wished to resign. On 19th December, the Council replied asking him to withdraw his resignation but to no avail. Mr Lennox was elected in his stead on 19th March 1926⁵, and the revered Mr Fox died early in 1927 in London. This closed the chapter on one of the early pioneers in the formation of the "Natal College for Advanced Technical Education".

 $\overline{\mathbf{II}}$

The 1924/5 Annual Report indicates that, at the meeting in August 1924, numerous people had been to the Observatory to observe Mars. Many papers had been read including one on "Eclipses" suitably illustrated with lantern slides. This was by one of the founder members, Miss Coates. The greatest moment of the year was a visit by Mr H E Wood FRAS of Johannesburg in April 1925 where some thirty persons had been present. Mr Woods had mentioned that "with a view to increasing interest in the Association he would be pleased to meet senior pupils from any of the higher class schools in Durban at the Observatory. Visits have already been made by pupils from the Girls High and Durban High School, and these will be continued."

The report ends with a note that the Association had received a donation of £7:18:8d from the "Natal Society for the Advancement of Science and Art" which was being wound up. The money was used to purchase a series of lantern slides which will be used in future." The "NSASA" had been running concurrently with the body called the "South African Association for the Advancement of Science", better known as the "S2A3" and the Natal Society was somewhat of an anachronism. Hence it was closed and the funds in their possession were handed over to the Observatory Association. None of the slides have been found.

The next report (July 1925/July 1926) states that nine lectures had been given during the year, including one by Prof. Dr Halm who worked at the Royal Observatory in Cape Town (father of the Secretary Mr E A Halm?) His subject was "Luminosities of Stars". This was at the August 1925 meeting. In April 1926, Mr C F Wickes read a paper entitled "The First Minute of the Astronomer at the Natal Observatory, Durban" - this of course being Edmund Nevill, and at the next meeting Miss Coates spoke on "Astronomy and the Bible". Although attendances had dropped somewhat, the standard of talks had improved.

The report further states that "Unfortunately our observing season is very short and not continuous at any time". The reason given was the difficult weather pattern which frequentlyplagues Natal. Despite this, the Observatory had been opened for the public every Thursday evening with Messrs F T Fox and H Roadknight being the main driving force. Membership had declined to 58 of whom six were country members.

During the year under review, the Association had suffered grievous loss. The President, Dr Sam Campbell, the Vice-President Mr G A Champion and Dr Wynn Westcott had all died. To lose both the President and the Vice-President in one year was a great blow and the loss to Durban especially of Dr Campbell was tragic. A apecial book of obituaries and tributes has been published and was (in 1978) available at the Killie Campbell Museum in Durban and elsewhere. The Natal Astronomical Association and the Natal Mercury added their own Obituary which reads

"The Natal Mercury"

NATAL ASTRONOMICAL ASSOCIATION

The Passing of the President

At the monthly meeting of the Natal Astronomical Association on Tuesday 23rd March [1926] the Vice-President Mr J Bennet Mumford said: "We are meeting tonight under a cloud. By the death of Dr Campbell, we as an Association have lost our President and as individuals we have lost a friend. So much has already been said concerning the merits of our friend that it scarcely seems necessary to make any further remark in putting to you the resolution that I am about to propose, but we cannot let the occasion pass without a few words.

(He then listed out many of Dr Campbell remarkable achievements). *To continue*: This generation knew and honoured him, and the generations to come will learn to love, to revere, and to honour the name of the beloved physician, Samuel George Campbell.

The following Resolution was then passed in silence, all present standing:

"The members of the Natal Astronomical Association desire to record their sense of irreparable loss they have sustained by the death of their President, Dr S G Campbell, whose great abilities, untiring energy and unfailing kindness of heart not only endeared him to all with whom he came into contact, but hereby express their appreciation of the valuable services rendered by Dr Campbell to their Association, and their heartfelt sympathy with Mrs Campbell and the members of the family".

The Committee has decided, as a silent tribute to Dr Campbell to leave the Presidential Chair vacant until the next annual meeting.²

Dr Campbell had died at 7 a.m. on 11th March 1926. With his passing, Dr Samuel George Campbell, CMG, MD, FRCS (Edin.) left a gap which could never be properly filled. Mr Forbes

(Secretary) conveyed the text of the above Resolution to Mrs Campbell on 23rd March.

On the same day, the Natal Mercury published an article which indicated that "some property developer" was trying to convert sections of the Botanic Gardens into building sites. {Where have we heard that sort of thing before?} This caused quite a furore and the newspaper reminded readers that in 1923 "that portion of land from Edith Benson Crescent - half way up the land - to Currie Road amounting to some seven acres and right next to the Observatory, had been reserved in perpetuity as part of the Gardens." Nothing more was heard about this nefarious scheme!

In April 1924 the Town Council received Government permission to take over two of the Observatory acres for the purpose of an underground reservoir. The Observatory ground remained the property of the Union Government and thus a position was established which remains unchanged to this day.³

On 31st July 1926, the Natal Mercury published a long and superb article with illustrations on the subject of Astronomy and the Observatory. The indefatigable Mr Wickes (spelt Wicks in the article) was given quite a "write-up". We include a short review of his life below:

Mr Cecil Frederick Wickes was born on 20th September 1891 in the then village of Isipingo, just South of Durban, of parents who originally hailed from St. Alban's in England. After schooling, he became an engineer and served many years in such places as Coronation Brick and Tile and latterly in various sugar mills, notably Entumeni near Eshowe in Zululand. His hobby of Astronomy was very much to the fore all through his life and in May 1934 he was elected a Fellow of the Royal Astronomical Society. His connections with some of the members of the Natal Astronomical Association started some time before the Association was formed and lasted right through the years until he retired in the 1960s. He died on 19th August 1973 and some of his papers, to which we have already referred, were preserved by his widow. Wick Street in Verulam and Wicks Street in Isipingo were named after him.

According to the report of the year 1926/7, Messrs A Buchanan and C W Lennox were reelected as Council Representatives. Eight meetings of the Association had taken place including one in October 1926 when Lieut. Commander A W Knight RNR, delivered an address entitled "Sidelights on Nautical Astronomy". In April 1927 Miss Coates lectured on "Gleanings from my Astronomical Notebook" which, had there been tape recorders in those days would probably have been fascinating listening.

Membership had dropped to 62 with eight of these being country members. The Association had received complaints that not enough practical astronomy was being carried out but this had not stopped some 300 visitors coming to the Observatory during the year. Amongst these were quite a number of students from the "Coates Secretarial Academy" and several parties of children sponsored by the Durban Broadcasting Studio. Yes, radio had arrived in town and the South African branch of the Radio Association had asked the Association for assistance in their "investigations into the ionisation of the atmosphere by the Sun and the consequent interference in the reception of radio signals." During the October 1928 sunspot maximum, the Association

gave their full support and recorded sunspot activities and surface irregularities.

Mr Wickes (then Secretary/Treasurer) had met the new H.M.Astronomer Royal, Dr Spencer-Jones, who in turn had enthusiastically suggested that the Association affiliate with the Cape.

The Report continues with a summary of astronomical developments in the Union, stating that "apart from the Royal Observatory and our Union Observatory, the Yale and Smithsonian Observatories are fully established and doing good work. The observatory of the University of Michigan is now under construction at Bloemfontein (soon to house the 26½ inch refractor on Naval Hill) while the latest instrumental equipment of the Harvard College Observatory arrived in Bloemfontein last week (June 1927) awaiting its erection." Income for the year was £23:6:0d with £17 in outstanding subscriptions. Expenditure was £18:9:11d leaving a few pounds in the kitty for the new Committee to handle. Messrs A Buchanan and C W Lennox were again re-elected by the College Committee for the ensuing

period. At this stage, individual type-written reports ceased and were replaced by extracts from the "Journal of the Astronomical Society of South Africa."

On 13th April 1928, a letter dated three days previously from the new Union Astronomer Mr H E Wood was read to the College Council. This informed the Council that"The Treasury Department had officially transferred ownership of the Troughton and Simms Transit Telescope and the Frodsham No 1888 chronometer to the Natal Technical College". Both had been on loan to the College for many years and it proved that the wheels of officialdom ground exceedingly slowly in those days, but also like today.

The membership dropped to fifty-four persons during 1927/8 but about 150 people had visited the Observatory during the period. On 8th December 1927, a total eclipse of the Moon could not be observed owing to severe thunderstorms. On 19th May 1928 there was a partial eclipse of the Sun and during good weather - for a change - several photographs were taken before the Sun set in the evening. Messrs. Roadnight and Fox were in charge of the large telescope and a Mr Thomas Ellis - a Founder Member of the Association - had died during the year.⁴

On Sunday 28th October 1928, the planet Jupiter was to pass behind the Moon - this being a total "occultation" - and Mr Wickes wrote an article on the subject, published the day before by one of the local newspapers. Unfortunately there are no records to indicate whether observations had been successful or not.

As there had been a proposed visit to Durban in July 1929 by the British Association, the College Council set up a sub-committee to deal with it.. Prof. Clark and Mrs Mabel Palmer were duly elected onto the Council⁵. Buchanan and Lennox were re-elected and the former was very much involved with the sub-committee and the Astronomical Association in making final arrangements for the visit, which was to take place almost immediately after their A.G.M.

Apart from some serious renovating of the walls, roof and dome of the old Observatory building, the Boy Scout movement had requested that the Association set up a "Starman's Badge" course. This was done and has now become a regular feature with local branches of "ASSA" throughout the country.

Prof. Roseveare gave a lecture during this session, his talk being entitled "Recent Developments in Astronomy" and at the May 1929 meeting, Dr W J Luyten of Bloemfontein spoke on "The Great Meteorite at Grootfontein, South West Africa".

The activities of two elected representatives of the Technical College Council have been somewhat under-stated, the reason being that troubles concerning the Observatory had started to make themselves felt. On 29th June 1929, the Association's Secretary had sent a letter to the Council enclosing the usual fee of one guinea for the use of the telescope and advising that severe damage had taken place at the Observatory during a hailstorm and that repairs could only be effected when funds became available. This caused an immediate problem with the Council as not only had the Observatory building started to deteriorate rapidly but also the Council itself was rather short of funds. Something had to be done and, at a meeting of the Observatory sub-Committee on 4th April 1930, the following Resolution was passed: "To recommend that, as the Natal Astronomical Association had taken over the functions of the Observatory Committee, this Committee be allowed to lapse and that the Association be invited to act as the Advisory Committee of the Council [Technical College]."8 This was agreed to by the Council and it was therefore as at 11th April 1930 that control passed direct to the Astronomical Association. The College Council still had some dealings with the Observatory as they were asked for assistance in paying for repairs to the building.

The Observatory Committee requested - and were granted - permission to waive the annual fee of one guinea for the use of the telescope and also requested payment of £2 for the reconnection of the electricity to the Observatory! Council agreed to all these requests.⁹

This state of affairs continued as the building aged, bearing in mind that a period of 18 years had passed since Nevill's departure, at which time the Observatory had effectively been vacated. The building was by now forty-eight years old.

SOURCES AND REFERENCES

Notes: "NCT" and "LHM" refer to the Council Minutes of the Natal College for Advanced Technical Education and the Local History Museum, Durban respectively. Items starting with dates have been taken from the Council Minute Books

Section I:

- 1. 25th September 1922, pp 243 & 244, NCT & LHM
- 2 20th October 1922, p. 254 ibid.
 - 3. Minutes of the 1923/4 A.G.M. of the Natal Astronomical Association, LHM
 - 4. 20th June 1924, item D4, page 277, NCT & LHM
 - 5. 19th December 1924, item B2, pp 605 & 606, ibid

Section II:

- 1. 20th March 1925, page 672, NCT and LHM
 - 2. Obituary to Dr S G Campbell ex "Obituaries" page 30, Killie Campbell Museum/Library, published by Robinson & Co 1927. Also LHM etc.
 - 3. 23rd March 1926, Natal Mercury, page 14, Don Africana Library Microfilm
 - 4. A.S.S.A. Journal Volume 2, No 3, October 1928, p. 138 and LHM
 - 5. 4th December 1928, page 1898, NCT and LHM
 - 6. A.S.S.A. Journal Vol. 2, No 4, January 1930, pp 209/10, LHM
 - 7. 23rd August 1929, p 1979, item 17, NCT and LHM
 - 8. 11th April 1930, pp 2222/3, item C4, NCT and LHM
 - 9. 13th June 1930, page 2259, item D6, NCT & LHM

| o 0 o |
|-------|
|-------|

A PERIOD OF DOLDRUMS

| CHAPTER FOUR |
|--------------|
| |
| |
| 1930 - 1948 |
| |

Ī

At the start of this period, we find that the Observatory buildings were once again, suffering from the ravages of time and weather. The depression which had swept the world was having a marked effect on membership, money was extremely short and even the Union Government was suffering from cash-flow problems. All this created a situation where the dome brooded silently over the city, with little or no work being done to keep it in decent order or even to put the venerable Grubb telescope to some use. Older members were dying off and the death of Dr Sam Campbell removed a large "slice" of the driving force to keep things going.

The ninth session of the Association (1930/31) indicated that seven meetings had taken place, membership had dropped to thirty three. Attendance had been fair at about twenty-two and a Mr Horrocks of the Cape Centre had visited Durban. Whilst there, he had urged the Association to amalgamate with the Cape body and join "A.S.S.A.". Despite the above remarks, the Observatory had received many visitors during the year. A letter dated 14th

April 1931 from the Association's Secretary to the College Council indicated that this amalgamation was to take place and that the name of the Association was to be changed to "The Natal Centre of the Astronomical Society of Southern Africa". No date for this change was given. ²

At the Annual Session of A.S.S.A. in 1932, it was reported that the Natal Association could be incorporated and members were asked to approve this move.³ As this meeting probably took place late in July of 1932 and as the next available copy of the Session is dated 1935, it would appear that the "Natal Centre" came into being shortly after the 1932 meeting.

More work was required at the Observatory site and in May 1932, serious leaks in the roof were reported to the College Council. Colonel G T Hurst, Councillor E J Elgie and Mr Capstick were appointed by the Council to liaise with the Centre's Committee and report back. This they did the following month, reporting that "the building is in bad condition and requires, apart from the re-covering of the dome to make it weatherproof, considerable repairs to the interior".

Col. Hurst submitted tenders he had received for carrying out the necessary work and recommended the acceptance of the following: "J M Walker - for repair to the staircase etc., £32, Gourock Ropework Company, for recovering with canvas £32". These amounts were accepted. ⁵ Despite this, it appears that only the dome was actually attended to. The condition of the stair was still in a dangerous state. The flat roofing was also leaking and astronomers were finding it difficult to use the building. They also wanted to start a library but could not do so until repairs were effected. The matter was once again referred to the College Council for action. ⁶ Both the

College and the Natal Centre's Finance Committee were highly embarrassed financially at this time and repairs had to be deferred. In the meantime the College allocated rooms for the use of the Centre until repairs could be carried out. The Observatory was locked up and when the College Committee decided to visit the place, the keys could not be found. On 21st August 1933, the Centre Secretary wrote to Council once again calling attention to the now highly dangerous condition of the stairs and the floor. Concern was raised about the possibility of an injuries claim. This prompted Col. Hurst and Mr Capstick to report back to Council without further delay.

The repair estimates had by now risen to £60 and tenders were again called for. The electric lighting had been disconnected some years earlier and £20 was required to put the wiring back into sound condition. Between April and May 1934, Councillor Elgie reported that certain friends and members of the Natal Centre had donated funds which might cover these

costs. This appears to have had the desired effect as by 1935, the whole building had been overhauled and repaired. From the Centre's Report of 1934/5, we are told that:

"This, the twelfth year of our existence, has been remarkable in many ways. At the last A.G.M., we were favoured with a visit from Sir Frank Dyson, late Astronomer Royal, who gave us a most interesting lecture on the history of the Greenwich Observatory...... The [Durban] Observatory has been placed almost in a state of complete repair by the Technical College Council; we say 'almost' because the floor of the dome still requires a certain amount of attention, but the whole place has been thoroughly cleaned out and we have arranged with the Union Health Department [then occupying the old laboratories] to have sweeping done regularly.

"Electric light has been installed and we have a number of suitable chairs in the computing room. More of the public are now using the Observatory and they always find some of the Society's officials only too pleased to guide them on clear evenings....... Scouts, Guides, Rangers and Rovers are all asking for our help and we are happy to render any assistance in our power. The Observatory, although erected more than fifty years ago, has not outlived its usefulness.

The Office-bearers for 1934/5 are: Chairman Mr J Bennett Mumford, Vice-Chairmen Mr H J S Bell & H J Roadknight, Secretary/Treasurer Mr J Willis, Committee Mrs Grix, Mr F T Fox and Mr H Swanson. £34 has been collected during the year and £37 has been disbursed. Monthly sweeping out of the Observatory costs 2/6d."

One of the Founder Members, David Lamont Forbes died in October 1934. He had studied Law at Edinburgh University and had practised in Durban from 1906 until 1931 after which he had settled in 'Mtunzini in Zululand where had practised for a while. Both he and Mr Wickes had made some excellent drawings of Mars during its last closest approach and had he been elected

a Fellow of the Royal Astronomical Society. Probably his greatest achievement was bringing the old telescope back into practical use.⁸

With the death of Mr Forbes, the matter of writing astronomical columns in the local newspapers

fell on the shoulders of Mr Wickes, who carried on this tradition for a few years. During this time, things appear to have quietened down considerably. Very little news was forthcoming from the Observatory or its Centre Committee. However for record purposes, the representatives of the Technical College that were appointed to serve on the Observatory Committee to "keep and eye on the place" are set out hereunder:

1935 March: Messrs A Buchanan and Councillor S K Elgie

16th August: Rev. G C Van Rooyen succeeded Mr Buchanan

8th November: Mrs Robson succeeded Councillor Elgie

1936 20th March: Rev van Rooyen and Mr John Roberts

1937 7th April: Rev. van Rooyen and Mr Roberts

10th September: Mr J Murray succeeded J Roberts who had died in May

1938/43: Rev. G C van Rooyen and Col. G T Hurst

1944 6th January: Mr F F Naude and Col. Hurst

14th March: Mr H L Buzzard who succeeded Mr Naude

1945 13th March: Mr Buzzard and Col. Hurst

1946 Names not recorded, probably Buzzard and Hurst

1947 March: Mr H L Buzzard and Col. G T Hurst

1948 Control of Observatory passed to the University of Durban.¹

The Rev van Rooyen and Col. Hurst had a good long innings together but unfortunately their activities up to 1944 have not been recorded. Information can be picked up from Committee records until the date of transfer to the University. From 1938 onwards the records are completely lacking and it has been rumoured that the Natal Centre collapsed completely. There is no proof of this but for a period of some years - at least from 1938 until 1944, there were no signs of Annual Reports to Cape Town and the Durban newspapers appear to have been completely silent on the matter. One thing is certain and that is that with the onset of World War Two in 1939, things would have slowed down considerably. Being a major port on the African Coast, troop ships were coming and going all the time, the citizens of Durban were going out of their way to bring comfort and hospitality to many men passing through on their way to the war zones.

The corner appears to have been turned when, on 14th April 1944, the Natal Centre came to life again. But we must go back four years to an event which passed completely un-noticed in Durban. On 13th January 1940, Edmund Nevill died in England after a short illness. It is thought that the Old Master had died virtually a pauper. His widow Mabel was to outlive him for quite a number of years. The story of Nevill's latter years will be told in a later chapter.

Reference to the Monthly Notes of A.S.S.A., Vol. 3, No 5, dated 25th April 1944 shows that the apparent closure of the Natal Centre was as a result of the War and the black-out conditions. The new Executive of the Centre had been elected and were Mr J Bennett Mumford (Chairman), Mr (Now Dr.) A J Cousins (Secretary/Treasurer), Messrs. H J S Bell, E C Chubb, B T Fox and H J Roadknight. Films entitled "The Earth in Motion" and "Exploring the Universe" were shown at the April meeting and Mr Mumford read a paper entitled "The Shadow of the Earth" at the end of the meeting. It seems that Mr Cousin was the last person to use the Grubb telescope in a professional manner, having taken advantage of the black-out and consequent really dark skies. As this is being written, he is still an active and professional astronomer at the Observatory in Cape Town.

From this point onwards, the Centre's activities received plenty of mention in the editions of "MNASSA" and things started to pick up again with the College Council. Once more, the building required considerable attention, roofing was leaking, painting was required and the dome was also requiring repair. No use was being made of the building and its contents other than that by Mr Cousins. About 2 500 people had visited the Observatory since 1924. ²

"MNASSA" of July 1944 mentions that minor repairs and painting had been carried out and also that Mr E C Chubb F.Z.S. - who was then Curator of the Museum in Durban - was "booked to give a lecture on 'Meteors and Meteorites' in the Durban Art Gallery on 18th August that year.³

A lecture on the history of the Durban Observatory and the 1882 Transit of Venus was given by Mr Roadknight and in July 1945, Dr Zanstra who was quite famous, gave a talk on "Nebulae, Stellar Temperatures and the Expansion of the Universe" with lantern illustrations.³

In the same issue of MNASSA, Mr Cousins saw in print extracts of his lecture on the Sun. He also mentioned that H C Mason, who had been a professional astronomer under Nevill, had reverted to amateur status and as such, had contributed a paper on the subject of the Moon at the meeting of the British Association in South Africa in 1929. As Mason had worked under Nevill in 1897, obviously the Old Master had taught his pupil well.

Volume 5, No 1 of MNASSA contains a very good line drawing of the old Observatory in Durban, this having been by Mr A C Stubbins of the Natal Centre. On turning to some of the 1947 and 1948 circulars from the Centre, extracts show the following:

February 1947 The Observatory is open on Tuesday 25th and Thursday 27th. No February meeting of the Centre.

March 1947 Dr Paraskevopoulos, Astronomer in charge of the Harvard Observatory, Bloemfontein to give a lecture at the meeting of the Centre in the Art Gallery on Tuesday 18th March. The Observatory open on 11th, 13th, 25th and 27th of the month,

April 1947 Canon Gahan (Vicar of St. John's Church Pinetown for many years) will speak on the Solar System at the meeting on Friday 18th. [Canon Gahan was elected a Members of the ASSA in November 1926]

December 1947 Mr Alexander of Clyde Avenue Durban, appointed at Secretary. Report

on severe damage to Observatory dome during November. No viewing.

February 1948 Repairs to the Observatory had been commenced.

April 1948 No Centre meeting. Viewing evening on 7th, 12th, 14th and 28th

June 1948 If telescope is available for use, Observatory will be open on 11th, 14th and 25th. Telephone the Observatory At 27181 - Extension 913.

July 1948 Notice of A.G.M. in the Durban Museum on 16th. Mr A G Hoyer will be the speaker, subject "Origin of the Craters of the Moon". Observatory open on June 12th, 14th and 23rd.

August 1948 Owing to poor attendance, the A.G.M. was dispensed with and the Centre was to operate on the basis of the 1947/8 session. Viewing on 9th, 24th and 31st.

While the year 1948 was rolling along at the Observatory, the Technical College had been roped in once more to assist with repairs. Mr J J Smith quoted £100 for essential work to be carried out. This caused a Mr Wills of the College Council to complain that the Observatory, which had been a constant drain on College Funds, should now be transferred to the Natal University, especially as a new Survey Department had been started there. The Centre members had in the meantime had to cover the dome with a tarpaulin to protect the telescope. The clockwork had been soaked on April 19th and had stopped working. A further approach was then made by Council to the University.⁴

Prof. Neal of the University reported that the Chancellor Dr Malherbe had not made up his mind about the proposed transfer and the whole matter swing back and forth during the following few weeks until the whole matter had been thrashed out and the City Council's permission to make this move had been approved. Finally the City Council agreed and everything seems to have happened at once. The relevant portion of the College Minutes state as follows:

General Purpose Committee Meeting, September 9th 1948 - page 8077

E) <u>Telescope</u>: <u>Transfer to Howard College</u>

ix) (Letter) Dated August 20^{th} from Town Clerk, Durban, advising that the City Council at its meeting held on August 6^{th} had adopted the following resolution:

That in connection with the Refractory [sic.] Telescope handed over to the Durban Technical College in terms of Council Resolution dated 15th March 1917 the Council now approves of this instrument being handed over by the Natal Technical College to the Natal University College [Howard College], subject to observance of the previous conditions as previously specified. A copy of this letter has been forwarded to the Principal of the Natal University College, Pietermaritzburg, for his information.

X) <u>Dated August 31st</u>, to <u>Town Clerk</u>, <u>Durban</u>, conveying the Council's thanks to the City Council for their helpful attitude in the matter of the transfer of the telescope and adding that this was much appreciated.

The Principal reported that he had received a letter from the Registrar of the Natal University College stating that the telescope had been accepted on the conditions laid down by the City Council as embodied in the Town Clerk's letter, Noted with satisfaction.

What were these "conditions"? Basically, they were to ensure that there was suitable accommodation for the instrument, that it be used for the benefit of the citizens of Durban and also that it *be properly looked after*. (Author's emphasis.)

At this point, all reference to the Telescope, the Observatory and the Astronomical Society/Natal Centre cease in the minutes of the College Council. The Technical College had served its purpose admirably by extending the life of the old Observatory for a number of years. The University was now to be the custodian until its eventual demolition. The University College was to receive full University status at the beginning of 1949 and thus the dream of Dr Sam Campbell came to fruition.

From the foregoing, it is safe to assume that the date of the transfer from the Technical College to the University was 9th September 1948 [Some fifty two years before this chapter was re-written.]

*

SOURCES AND REFERENCES

Notes: Minutes of the Council of the Technical College shown as "NTC". Those of the Library of the South African Astronomical Observatory (Cape Town) shown as "SAAO" and the Monthly Notes of the Astronomical Society of Southern Africa shown as "MNASSA".

Section $\underline{\mathbf{I}}$:

- 1. Journal of ASSA, Vol. 3, No 1, pp 55/6, 1931, SAAO & LHM
 - 2. NTC, April 17th, 1931, pages 2488/9, NTC and LHM
 - 3. Journal of ASSA, Vol. 3, No 2, pp 86/88, 1931, SAAO & LHM
 - 4. NTC May 20th 1932, p 2840, NTC & LHM
 - 5. NTC, June 17th 1932, p 2876, ibid
 - 6. NTC September 16th 1932, p 2942, ibid
 - 7. NTC August
 - 8. 31st 1933, p 3283, ibid
 - 9. Journal of ASSA Vol 3, No 4, p 166, SAAO & LHM

Section II:

- 1. NTC Council Minutes, pages 3739, 3864, 3949, 4066, 4448, 4794, 5112, 5462, 5786, 6122, 6384, 6640, 6704, 6996, ?? and 7654
- NTC June 8th 1944, page 6751
 MNASSA, 30th June 1945, page 57, SAAO
 NTC May 13th 1948, page 7986

----- o 0 o -----

DEMOLITION!

CHAPTER FIVE 1948 - 1957

Far from being the expected blessing, the take-over of the Observatory by the University of Natal in 1948, this rang the death knell of the old building and its contents. The University authorities cannot really be blamed for this as the Observatory was situated at least three kilometres away from the campus and therefore, a close watch could not be kept on the building and its contents. This lack of protection created a welcome home for various ne'erdo-wells, hoboes, layabouts and others of similar ill repute - none of whom had the slightest interest in the historical value of the building in which they lay their unwashed heads. This was a far cry from the halcyon days of Edmund Nevill, Mabel and their three children.

Just before the actual take-over, there was a sudden 're-think' by the University on the advisability of this step. The Technical College informed the University Council on 7th July 1948 that the land on which the buildings stood actually belonged to the Union Government and not to the College or the City Council. This position was hesitantly accepted by the University.

The following month, the Dean of the University, Mr J H Neal wrote to the Registrar in Pietermaritzburg advising that something had to be done extremely quickly as, at that stage (19th August) the covering of the dome "is now off completely and if this is not replaced, damage to the telescope will take place. An amount of £140 would be required for this work." This was authorised on receipt of the letter.

After this matter had been attended to, the University wrote to the Technical College on 25th August, formally and finally accepting the telescope and offering thanks for this gift. This letter was attended to at the College Council meeting on 9th September and the take-over took place on that date. From then onwards, there are no documents in the Archives until 1953, so it must be assumed that everything ran fairly smoothly during this period. Certainly the Departments of Mathematics and Survey made use of the Observatory as Prof. F J Schuddeboom used the telescope on numerous occasion to assist in teaching trigonometry. Prof. Biesheuvel and others from the Survey Department also used it. Meanwhile, the local Astronomical Society had, it seems, gone into hibernation once more.

A 'wake up' call went out in the Sunday Tribune on 14th June 1953, when they published an article depicting a Mr Egmont Hailpern who was polishing a telescope mirror. The call was to try to start a mirror grinding class. This was half-heartedly answered and the old Natal Centre was resurrected some months later.

All was certainly not well in the Observatory. On 10th August 1953, Prof. Biesheuvel wrote to the University Registrar stating that "it had been reported by Prof. Connell and Prof. Schuddeboom that the flooring of the Observatory is in a dangerous condition. It is recommended that notices be posted immediately warning members of the public not to go into the place." The notices were duly posted. White ants had once again eaten away most of the flooring and the estimated cost of repair was £800. The Town Clerk of Durban was advised of this and asked if they could assist. This brought forth a negative response so an approach for financial assistance was made to the Public Works Department in Pietermaritzburg. They in turn said no as the PWD felt that they had no use for the building, and could not be expected to sink money into these repairs. They suggested (yet again), that the telescope be removed and taken to the University Campus. Considering that such a move out of the building had first been mooted in 1912 and had been repeated several times during the following decades, the University started enquiries as to costs. They wished to know the present day value of the 8" Grubb refractor, which departments (if any) were using it, which departments would use it if it was moved and the cost of transporting it to the Campus and housing it in a suitable structure. It took a while to get answers but on 23rd March 1954 the telescope was stated to be worth £1 000, transport would cost £30 and it would cost about £100 to overhaul the instrument and housing it in a permanent structure would cost £400.

As far as "use" was concerned, Prof. Schuddeboom advised Prof. Connell that, as a Department of Astronomy was not being considered, the instrument would only have "entertainment value". Nothing happened until 9th August when Prof Biesheuvel wrote to the Registrar suggesting that the telescope be dismantled and stored at the Campus or "it should otherwise be disposed of."

No immediate action was taken and Prof Schuddeboom advised that, in July of that year, vandals had broken into the Observatory and had stolen the sighting telescope (a 3" refractor), a reading telescope (used for reading the setting circles) and four eyepieces. Further, the clutch axle had been damaged, part of the roof had been ripped open, the electric lights had been stolen and several windows had been smashed. Naturally the University was perturbed at this news and it attempted to lodge an insurance claim. As there was no cover in existence, there was no claim. This prompted them to have the telescope dismantled as soon as possible. McLean's Engineering Services (Pty.) Ltd. Gave a quote for the work - £60 to dismantle the instrument and remove it to Howard College, and a further £15 if the dome was also to be dismantled. This was on 1st October 1954.

On 9th November 1954, McLean's Engineering were authorised to proceed and it appears that about 19th November, the telescope was dismantled and taken up to the rear verandah of Howard College at the University. It appears that the lens was removed by Mr D D Robertson (Secretary of the Natal Centre) for safe-keeping shortly before the move. Prof. Scogings took the Transit Telescope to the Survey Department where it lay for a number of years.

The clock drive probably went to the University with the telescope parts. Thus, the old telescope, the gift of Harry Escombe to the citizens of Durban in 1882 left its home after a sojourn of seventy-two and a half years. His dream Observatory was now an empty shell. On 17th January 1955, the University requested the Electricity Department to disconnect power.

The final electricity account from the Corporation, amounting to nine shillings and five pence was received on 11th February.

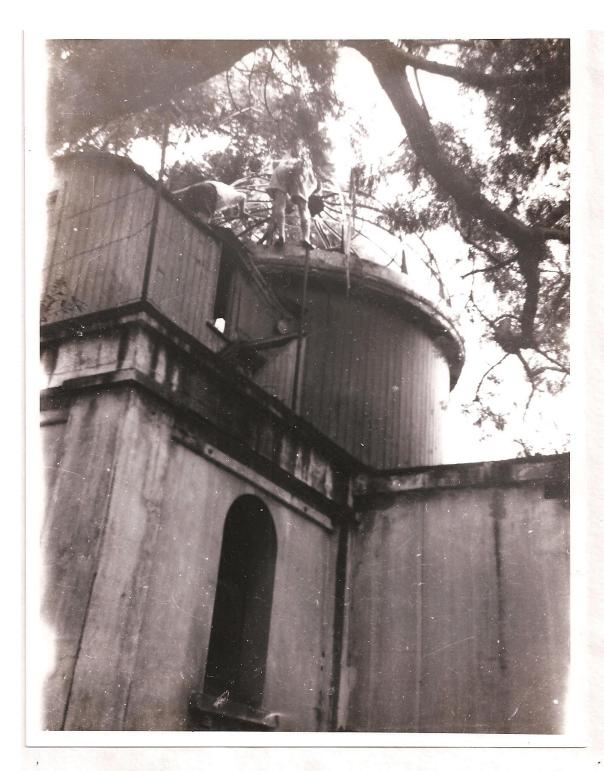
What of the cast iron dome? The PWD wrote on 7th June 1955 advising Prof. Biesheuvel that if the University so wished, the dome was theirs. He wrote back advising that as the dome was "unsuitable", the University would have no use for it. It was at this stage that all references to their Observatory, the dome and the telescope ceased and we are left with a few hazy guesses as to their end.

Mr Robertson had the eight inch lens and shortly afterwards - so we gather - "it was placed in a cupboard, forgotten about and the cupboard was sent off to the sale room". This seems almost unbelievable. It also appears that the telescope and its parts were "wrapped up in sacking and eventually sold to a local scrap merchant." Enquiries with all local scrap merchants in Durban produced no information at all. As for the clockwork mechanism, anyone of sense would have carefully removed this before the instrument was dismantled and have kept it in a safe place but there is no trace of this beautifully crafted piece of equipment.

The dome itself was dismantled by members of the Natal Centre, the lead ornamental top piece was sold. The parts, wheels and ribs were taken to the Chairman's home on the Bluff where they ended up as "garden decorations" - eventually being sent off to a scrap merchant for melting down. No parts of this dome have ever been seen since.

While all this was going on, an offshoot of the Natal Centre, naming itself the "Natal Amateur Society" had started up - probably the result of the call for a telescope making class - as a result of which, the old Natal Centre called a meeting between Messrs E C Chubb, G Pollard, H Ottens and Dr D S Evans (all members of ASSA) on 15th September 1956. At that meeting it was suggested that the Natal Amateur Society hand over all its assets and that the "new" Natal Centre be started up, if possible some six weeks later. The meeting of the two bodies took place on October 31st and on 28th November a well attended meeting of the "new" Natal Centre took place with Mr Hein Ottens taking the Chair. Mr Ryan was elected Secretary and Mr D R Harpur was elected as the Treasurer. The major goal, that of saving the old Observatory immediately foundered and on 23rd August 1957, the Daily News reported that "all attempts by the Society to save the Observatory have failed. The Observatory will be pulled down soon - possibly during the International Geophysical Year......" So we know that the building still existed at that date.

The very last photograph of the Observatory known to exist was taken by Mr G Roberts (later a professional astronomer at the SAAO in Cape Town) with an old box camera and, judging by the state of the trees which were in full bud, this was during spring of the year 1957. It shows the dome being dismantled by the Centre members. The ornamental top piece of the dome - previously referred to - realised an amount of £14:8:9d in 1959. It had been kept, probably as a souvenir, by one of the Centre members.



Probably the very last photograph ever taken of the old Observatory building just prior to demolition. The dome is being stripped by members of the local Astronomical Society. Taken with a box camera, the negative has been rediscovered and presented to the Local History Museum Durban. Taken by Mr G Roberts in mid-1957. (by permission of Local History Museum)

Despite efforts to ascertain the actual date of demolition of the Observatory building, no record of it has been found. By deduction it must have been during November 1957.

Therefore, on one rather sad morning, the workmen moved in with their heavy mauls, pneumatic drills, wheelbarrows and tea making equipment and the first blows fell, destroying what might have become an historical monument.

With each blow, the ghosts of the past looked the other way. Harry Escombe's dream in 1881 was being completely obliterated. He would have shuddered. A slow procession of figures, wraithlike in the harsh glare of the sun, quietly flitted by. Who were they? Harry and Mrs Escombe and their daughters, the Edes family, the Isabels, the Greenacres, the Randles, the Acutts, the children Coral, Ivy, Katie and Fanny Escombe, the Grant children and a host of others who had lived and loved in the now ruined place.

Last of all, there would have been Edmund Nevill and his loyal and hard working wife Mabel who had spent thirty years of their lives trying to improve the scientific knowledge of the man in the street of Durban.

As the last bricks crumbled into dust and silence fell upon the devastation of an irreplaceable piece of Natal's early history, they turned away and left the scene, forever......

*

SOURCES AND REFERENCES

Acknowledgements are given to Miss Moberly, Archivist of Natal University, Pietermaritzburg, for having made available the file of correspondence and reports for the period covered by this Chapter. A general reference number of File No 12/4/5 of these archives applies to all the University material used or quoted..

| REMINISCENCES: | o 0 o |
|----------------|-------------|
| | CHAPTER SIX |

During the many months that were spent in researching for this treatise, a number of people came forward with small items of information and it is with gratitude to them that this chapter is dedicated. Many of them, when asked what they could remember about the old Observatory stated "Oh Yes! I remember that place! - you know we used to play there as kids" or "I used to drive past it every day until one day - I can't remember when - it had just disappeared".

To the Author's eternal regret, having lived very close to the Observatory from 1952 to 1954, although he noticed the building, he did not take any interest in it. Certainly, had the late Mrs Daphne Strutt, then Curator of the Local History Museum been on the scene in those days, the Observatory might have been saved.....

Prof. David Scogings - University of Natal:

"I remember seeing the large telescope standing all by itself on the verandah of Howard College for quite a while. Then one day it was gone and I don't know what happened to it. I also remember when they decided to demolish the buildings. I went straight down there and rescued the Transit Telescope and brought it up to the University and kept it in the Survey Department. This would have been in 1957 when I was a lecturer."

Dr Humphrey E Jones - late Principal of the Technical College:

"Round about 1920, I and the late Dr George Campbell together with Mr H Buzzard of the firm Buzzard and Lacey were taken round the Observatory by the hard working Col. Hurst. I remember seeing the large telescope in position and I believe that the Technical College was responsible for the well-being of the building and its contents. The keys were in the charge of Col. Hurst. The Astronomical Association existed some time prior to 1922 but Dr Sam Campbell was a great friend of mine. A Mr Pullen of the College staff was head of the Building Department."

Mrs Daphne Strutt - then Curator of the Local History Museum:

"Your late Chairman, Mr E C Chubb was Curator of the Durban Museum for quite a number of years. He remembered Mr James Bennett Mumford giving talks on Astronomy in the period from the 1920's right up to the '50s. When Mr Chubb retired, he was given a large drawing of the Observatory - this might still exist." [It has not been found - Author.]

Dr A J Cousins - past Secretary of the Natal Centre:

"My first visit to the Durban Observatory was in July 1924 when I met Mr C F Wickes, the most

active amateur in Durban at that time.

"I lived in Durban from 1930 until 1946 and from about 1938 I took an interest in the Natal Centre of ASSA. Mr Mumford was then the Secretary but because of pressure of work, domestic trouble and advanced years he was no longer a very active officer. With generous support from Mr Chubb, regular meetings were resumed in a lecture room in the Museum. Not only was Mr Chubb Chairman for a time but with Mr Bevis' help he frequently provided astronomical ciné films, film strips and slides from the Museum library for the meetings. I was secretary for a time.

"Amongst the older members (some of them Founders or near-Founders of the original Natal Astronomical Association) were men like Roadknight (Pharmacist), Fox (St John's Ambulance) and Bell (retired, whose son worked for a while at the Boyden Observatory). The Observatory was then in the charge of the Technical College, though that corner of the Botanic Gardens was already occupied by the government pathological laboratory. The astronomical society had the use of the observatory, paid for the electricity and contributed towards its upkeep. Sunlight, hail and wind ruined the canvas covering of the dome, termites attacked the staircase and moisture got into the lighting system, necessitating considerable expense for repairs. This was borne - somewhat reluctantly - by the College. A second bad hailstorm led to the final closing of the Observatory. That was after I had left Durban.

"From July 1939 until I left Durban I made frequent use of the 8-inch telescope to observe long period variable stars when they were too faint to be seen with my own three inch refractor. The results were sent to the AAVSO and published in the Harvard Annals. At the same time I observed a number of bright cepheid variables with my own telescopes. [Refer MNASSA, 21, 77 & 134 of 1962, 71 of 1968 and 27, 97 of 1968 - Author]

"During the war period, I observed lunar occultations, usually from my home in Upper Glenwood, but occasionally with the 8-inch at the Observatory. Accurate timing was quite a problem then.

"In 1941 I constructed a special camera to fit the eye end of the Grubb refractor to attempt accurate photometry by the Fabry method. I also had to construct apparatus for calibrating and measuring the films. For several reasons, some instrumental, some photographic and some due to poor sky conditions, the results - although considerably better than one usually gets by direct photography - were not of the same standard as those obtained later in Cape Town. However the experience gained with this prototype equipment contributed in no small measure to the success of the later work with improved equipment and better skies.

"Apart from research projects, the Observatory was frequently open to the public for 'Visitors' Nights' or for special parties by arrangement. Various members helped with these. On one occasion - after a press announcement - there was a double queue a hundred yards long! That was embarrassing for us and was not repeated. Mr Mumford contributed articles to the "Natal Mercury" and gave local radio talks. I was also "on the air" on several occasions."

Dr Cousins enclosed a copy of his publication "Photo-visual Magnitudes of Southern Stars" as reprinted from the monthly notes of the Royal Astronomical Society, Volume 103, No. 3 of 1943 together with other articles published by him. He also mentioned that when he was in Durban using the 8-inch Grubb refractor, the Transit telescope was on its pier but was not in adjustment nor was it being used.

Canon Gahan - past Rector of St. John's Church, Pinetown:

Although no longer with the Parish at the time of the investigation, several parishioners remembered this "Saintly Priest" until he retired in 1955 or 1956. He was dearly loved by his congregation and his successor remembered finding a wooden box full of astronomical glass slides in the Vestry. Their origin is unknown. These have, like so many other items, disappeared completely.

Mr Gregory Roberts - past Secretary of the Natal Centre :

Mr Roberts, now at the SAAO in Cape Town, was largely instrumental in keeping the Natal Centre alive during the lean periods and certainly helped to resuscitate it during the late 1960's prior to his departure for Cape Town to become a professional Astronomer. His several reminiscences are summarised hereunder:

"I probably became involved in amateur astronomy around 1946/7 at the age of 8 years - probably because my mother was interested in it. Around 1954 I made the first contact with the Durban group when I was then living in Glencoe in Northern Natal. As I used to plague all the South African Observatories with letters, they probably put me in touch with Durban. I recall receiving letters from A H Finnis and recall the name of Bevis. The society in Durban used to issue a monthly roneod newsletter called "The Sky in", very similar to that which I used to write for the Daily News. One of the first things that Douglas Robertson did on becoming Chairman, was to write to me mentioning that at that time I was the youngest member of the Society, and offered me all the encouragement that he could. He lent me astronomical books and was never too tired to write to me a long and interesting letter. One of the books that he gave me was 'Nature of the Universe' by Hoyle and this had an inscription addressed to 'D D Robertson from Cecil F Wickes, P O Entumeni, Zululand, 1952'. Robertson left for Rhodesia and I lost track of him after that.

"Cecil Wickes and I corresponded and he used to send me copies of the articles that appeared in the 'Woman's Weekly' section of the Natal Mercury - these having been written by one of the masters at Kearsney College who owned a six-inch refractor. He was a Mr Roy Quarmby. Then I heard of Mr Ottens making a telescope and for some reason or other the name the 'Natal Society of Telescope Makers' comes to mind.

"Early in 1958 I came to Durban and immediately contacted the local branch. Wally de Palo and I became great friends. Also Eddie Malan, Hein Ottens and R C Allen of Pinetown and Burns Very shortly after my arrival, *I assisted in the demolition of the Currie Road Observatory* [Author's emphasis] I never saw the telescope or any equipment that belonged there as this had

been closed down and cleaned out prior to my arrival. I helped to take the dome down and we carted it off to the Bluff where I met Wally de Palo for the first time. The bits of the dome were stored in his back yard in Sormany Drive for some time......

"As to what happened to the lens of the 8-inch Grubb refractor, all that I can remember is that there was someone in what was then Northern Rhodesia - about 1957 or 1958 - wanting to sell his eight inch telescope. He only had the lens in its cell and a micrometer for attaching to the eyepiece end. He wanted £100 for it but then devaluation came along and he wanted £150 but I wasn't prepared to spend this amount on a lens that I was purchasing 'blind' from Zambia. He was an elderly chap, in his seventies and was some sort of second hand scrap dealer. He called himself the 'Zambian Physical Research Labs.,' or something like that. He told me that the focal length of the lens was '15' but never disclosed where it had come from. Possibly his name was R K Lloyd but I am not too sure."

The above is fascinating and despite all attempts to trace this Mr Lloyd, these proved fruitless. What IS known is that the Grubb objective lens was 8 inches in diameter. That its focal

length was "f15" and that a micrometer had been stolen. A coincidence or not? We will never know.

Mr Roberts enclosed some newspaper cuttings from which valuable information was extracted. Firstly in May 1954, the Pietermaritzburg University had discovered "a valuable four inch telescope amongst the 'junk' in the basement of the building. It is believed to have belonged to a former Professor of Mathematics, Prof. Roseveare". This led to the rediscovery of the Watson Refractor, in excellent condition. The telescope was taken to Durban on permanent loan to the Local History Museum for eventual display amongst other Observatory artifacts.

Miss Maud Nevill, Edmund's daughter:

From conversations with Miss Nevill we find that when Edmund, Mabel and their children left for England in 1912, they roamed about for a fair amount of time looking for some place to live, eventually settling at Eastbourne where Edmund and Mabel stayed until his death. During the long years from 1912 until 1940, Edmund was asked on several occasions to become President of the Chemical Society in England but he always refused this honour. He was one of the founders of the Society and despite this, his advancing years made him feel that the journey from Eastbourne to London would be too taxing. In 1939, Miss Maude, his eldest child, was working on the executive side of a hospital and spent the Christmas of 1939 at her parents' home. Nevill suddenly developed a nasty cold and the doctor came to see him - the first visit for five years. As Edmund was then 93 years old, this visit was a very necessary one. The doctor said that there was nothing to worry about, but the next morning after breakfast, while sitting on the side of his bed, he got back into bed not feeling well. Maud immediately telephoned the doctor and just after she had done so, Edmund exclaimed "Oh! The engine has just run down" and twenty minutes later, on 13th January 1940, Edmund Nevill quietly slipped away to meet his Maker. He had been mentally alert right until the moment of his death.

Maud stated that "Dad truly flouted an ordinary life - all he really bothered about was if he had

a cheque in his cheque book - regardless if there was anything in the bank. He left all his books for his successor (Hodgson) but as he had died suddenly before our departure for England, Mr Innes from Johannesburg removed most of the really valuable ones and took them up to Johannesburg. There were well over a thousand books on astronomy, chemistry and the like in his private library.". [Innes himself was quite a collector of these types of books.]

About her mother, Maud stated that "Mother also lived to about 93 [she died in 1958, just after the Observatory had been demolished] so when I bought an annuity, my lawyer said to me that 'they don't know what they are taking on!' After Dad died, a small crater on the Moon was named after him." This is situated at Latitude 63°North and 17°West and is known as 'Crater Neison'. Edmund had been made a Fellow of the Royal Astronomical Society in 1907.

When Maud Nevill visited Durban during 1973, she had a good look around the site. To her surprise, the old house was still standing and she was able to walk all around it with the permission of the head of the Government Department of Health who now occupy it as a suite of offices.

At the time of writing this chapter in 1973, the Nevill's sons Guy and Ralph were both married and had children.. They had returned and settled in South Africa. Guy became very interested in golf and had turned professional. He set out the golf course at Salt Rock and also at the Pietermaritzburg Country Club. Ralph died in 1961 after an illness said to have been caused by war wounds. Very little is known about him. And finally:

Dr Patrick Moore of Selsey, England:

"I have often met Nevill's daughter Maud. The enquiry about the old library at the Observatory prompts me to say that it seems to have vanished into thin air and not much remains - a few of Nevill's note books, but that is all. I will check further."

The above was originally written in 1976 and, as the researches were just getting into their stride, neither Dr Moore or the author had any idea just how much material was to come to light! From one piece of paper with an early meteorological Report and the unearthing of the Transit Telescope, there grew a whole filing cabinet full of information.

*

TO CLOSE THE YEARS

| CHAPTER SEVEN | |
|-------------------|---|
| | |
| | |
| 1957 TO CENTENARY | Y |

With the destruction of the old Observatory, the Natal Centre was faced with the removal of its main centre of attraction, as a result of which, membership dropped and interest waned. A few stalwart members tried their best to keep things going. For example there were two public viewing evenings during late 1957, with members using their own telescopes. The evenings were to try to raise funds for a new observatory and although an amount of £39 had been collected, the efforts came to naught. However, thirty people did join the telescope making classes which were held at the Technical College. Membership stood at sixty but dropped to forty within months.

Mr Gregory Roberts was elected a member of ASSA and became a very enthusiastic supporter of the Centre. Mr Hein Ottens produced a booklet on "How to make a Telescope" during 1959. [A few copies of this might still exist]. The illustrations were drawn by Mr Simpson of the Department of Land Survey at the University.

The Centre was able to use the Shell Oil Company cinema as their venue for a while and when skies were clear, viewing took place on the nearby yacht mole in Durban Harbour. These viewing evenings raised an amount of £53 which helped the Centre bank balance considerably.

As previously mentioned, the 8-inch Grubb telescope still existed at the University and moves were made to try to replace the missing objective. Prices quoted from Germany were 3

200 DM for lens blanks or 8 697DM for completed lenses. These amounts were well above the Centre's financial resources and nothing more was done.

Mr Roberts, who had taken over the Secretary's job at the 1961 A.G.M. of the Centre, tried to raise support for a new observatory, suggesting to the City Council that they donate a small piece of land for this purpose.. Although a monthly tenancy was arranged for a portion of Burman Bush (North of the city centre) this eventually fell by the wayside. Roberts had even registered the Centre under the Company Act in 1959 to facilitate raising support from companies and citizens.

Centre membership dropped to thirty-two just after the 1961 Annual General Meeting and a new body called the "University Rocket Society" came into being at that time. The driving force behind this was Mr Roberts and its purpose was to assist in the tracking of something new in science, the Artificial Satellite.²

The 1962 Annual General Meeting in 1962 appears to have been the last before the Natal Centre was again wound up through lack of support. Mr Roberts was left holding the books and assets until October 1966 when the Daily News published a report that Mr Roberts wanted to start

start it up again. At that time, Roberts was a member of the Durban Satellite Tracking Station. The Secretary of ASSA in Cape Town sent a list of the ASSA members to Roberts and from this he was able to get some local members such as Messrs. Booysen, Duveen, Lipshitz, Malan, Hildebrandt and Miss Schumann together. These persons kept things going for a couple of years until, again the Centre went into hibernation on 11th September 1963. Then follows a long period of dormancy until the advent of "Sputnik" and the flight of John Glenn. These events caused the Centre to wake up suddenly and start working again.

On July 22nd 1969, the first meeting of the newly awakened Centre took place in the Shell House cinema. This took the form of a special Annual General Meeting and the first space film was shown. It drew so much interest that the film had to be shown twice. The attendance register showed that ninety-two persons had been present - including the author and his son. Twenty-three attendees joined the Centre whose fees at that stage were R 2 per adult and R 1 per junior. The "pound" symbol had recently given way to the "Rand".

The public at large were obviously not really interested in the possibility of an Observatory, so Mr Godfrey Hobson tried his best to interest the authorities in purchasing a Planetarium for Durban. Despite his efforts, this fell on deaf ears. This matter was raised once more many years later with a similar result. Enquiries concerning the fate of the Grubb telescope brought a response from Prof. Biesheuval who indicated that "friends of the Society's Secretary had said that the lens had been put in the drawer of a dresser, the dresser was then sent to a sale and after that, because the family had moved, nobody knew what had happened to it or the

dresser!" This has been referred to in the previous chapter. This report also dealt with the disappearance of the telescope tube and other parts and was dated 22nd August 1969.

From that stage onwards, the Centre started to flourish and reached its peak in the mid 1970s. Membership stood at just under one hundred. Meetings were held in a more suitable venue, The Teachers' Training Centre where on several occasions it was a case of "standing room only". On a few occasions, a separate room had to be used to accommodate the overflow.

On 15th February 1974, the inaugural meeting of a proposed "Natal Midlands Centre" was held in the bar of the Royal Hotel in Pietermaritzburg. This was attended by the author and a few other local people. It resulted in the formation of the Centre on 28th March 1974 at the same Hotel when, to the surprise of the hotel management, over two hundred people turned up. Of these, a large number joined the newly formed Centre which had been officially opened by Mr Steve Booysen, President of the Astronomical Society of Southern Africa. Great interest was shown in several telescopes on display, the films and slides prepared for the event and the publicity given by the Visitors' Bureau and the local news media paid off handsomely.

Both the Natal Centre in Durban and the Natal Midlands Centre in Pietermaritzburg carry on their good work to this day.

What of the research into the history of the Natal Observatory? This came to a climax when Miss Maud Nevill, the only surviving daughter of the late Edmund Nevill arrived in Durban on 23rd March 1977. She had been invited to officially open an exhibition which had been put together by the Local History Museum. As this was almost ten years after the old Transit Telescope had been handed to the Museum by the Department of Land Survey at Natal University, the timing was auspicious. The event went off extremely well and was filmed for television by the late Mr Pete Collins and screened some weeks later. All the artifacts which had been discovered during the research were on display including a "mock-up" of the transit room of the old Observatory.

What of the Observatory site? The area was flattened and turned into a macadamised parking area for cars belonging to the staff of the Government Health Department. Where the Observatory actually stood was marked by a concrete plinth on which were depicted

drawings of the building plans. It seems that these illustrations have since disappeared. The ground itself was declared an Historical Site at the time of the centenary of the Transit of Venus in December 1982, at which time a re-enactment of the observations took place with a number of civic dignitaries present. Nevill's old home still exists but, apart from the laboratories which have been expanded considerably, there is nothing left to indicate that the Observatory had once stood on the spot.

What of the other items referred to in this work? Is the eight inch objective lens of the Grubb telescope still somewhere in Zambia? Is the clockwork mechanism of the old telescope in some cupboard of Natal University? Is the Kullberg Mean Time clock, which was eventually taken to the Union Observatory in Johannesburg, bought by one of the astronomers and moved to Bloemfontein and then thought to have been moved to the Cape, in existence in Paarl or somewhere nearby? We shall probably never know.

In the year 2000, as we approach the new millennium, Planetaria are wonderful places to spend an afternoon or evening letting someone else do the work. Computerised telescopes are the "in" thing when one can sit inside and watch a flickering screen, the "Web" can give you wonderful pictures taken by the latest enormous telescopes around the world and from space, armchair astronomy in numerous books is an easy way to learn about the Universe, but, can anything beat going outside and looking upwards at the heavens with one's own eyes?

To see the rings of Saturn, to watch the movement of Jupiter's moons, to look into the heart of the Orion nebula with one's own telescope is worth all of the above. It is feared that mankind has lost the art of looking upwards.

To paraphrase the words of Mr Edmund Nevill FRAS, FRCS, Government Astronomer from 1882 to 1912, in his book on Astronomy, "if this small work has awakened an interest in a fascinating subject, then well and good".

May the person who has to try to put together the story of Astronomy in Natal during the next hundred years fund it as fascinating and rewarding as this has been.

*

----- o 0 o -----

BOOK THREE - INDEX

(Note by Editor: The page numbers given are remanences of the original typewritten book. By editing the book and transforming it to PDF file the original page numbers fell away. Technology have made the Index redundant. To find any information, just do a search (click on find) of the PDF document. - cdc)

Page No.

A:

Admiralty Wireless Station

Situated at Jacobs 185

Alexander, Mr

Elected Secretary of Centre Dec. '47 200

Astronomical Society of Southern Africa

Referred to as "A.S.S.A." 189

A.S.S.A. (Natal Centre)

Formed in 1932 197

B:

Biescheuval, Prof (Dept. Of Land Survey)

Uses Grubb telescope frequently 204

Blenner-Hasset Mr

Offers to overhaul clock & lighting 189

Booysen, Mr Steve (Then President of ASSA)

Inaugurates Natal Midlands Centre 215

Boy Scouts

Starman's Badge 194

British Association

Proposed visit to Durban July 1929 194

Buchanan Mr A

On Observatory Committee 184

Supplies list of Nevill's books 184

Buzzard Mr

Sub-Committee for re-siting 'scope 182

\mathbf{C} :

Campbell, Dr. Samuel George, CMG, MD, FRCS

At "N.A.A." foundation meeting 187

Elected President of "N.A.A." 187

Death of on 11th March 1926 192

Obituary to 192

Capstick Mr

Elected to College Council 1932 197

Champion, Mr G A

```
At "N.A.A." foundation meeting 187
```

Death of in 1926 192

Chubb, Mr E C, FZS

Elected to Natal Centre Committee 200

Curator of Durban Museum 200

Lectures on Meteors & Meteorites 200

Clark Mr Hugh (Prof.?)

Proposes forming "SAAS" 182

Sub-Committee for re-siting 'scope 182

Takes Transit 'scope from J'burg 183

On Committee for Observatory 184

Goes overseas 185

At "N.A.A." foundation meeting 187

On committee for visit by Brit.Assn. 194

Page No.

Clock Drive mechanism

Overhauled 184 et seq.

Soaked in storm, damaged April 1948 201

Apparent disappearance 216

Coates, Miss

At "N.A.A." foundation meeting 187

Gives slide lectures in Durban 191

Lectures on "Astronomy & the Bible" 191

Lecture: "Gleanings from Notebook" 193

Coates Secretarial Academy

Linked with Miss Coates ? 193

Cousins, Mr A J (Now Dr.)

Becomes Sec. Of Natal Centre 200

Recollections and works published 209

D:

Dome of Observatory

Requiring attention 182 et seq.

Dismantled by Centre Members 206

Duke of Connaught,

Lays foundation stone of Tech. 182

Durban Astronomical Association

Moves to form body ("N.A.A.") 184

Durban Broadcasting Studio

First mention of 193

Dyson, Sir Frank (late Astronomer Royal)

Visits Durban 198

Lectures on Greenwich Observatory 198

E:

Elgie, Councillor E J

Elected to College Council 1932 197

Reports on voluntary donations 198

Ellis, Mr Thomas

Founder Member dies in 1928 194

Forbes Mr David Lamont FRAS

Onto Observatory Committee 184

at "N.A.A". foundation meeting 187

Death of in October 1934 198

Summary of his life 198

Drew illustrations of Mars 198

Fox, Mr F T

Keeps Observatory open each week 192

Page No.

Fox, Mr W

Chairman, Observatory Committee 184

Addresses foundation meeting 186

Elected Vice-President of "N.A.A." 187

Death of in London in 1927 191

Frodsham Chronometer No 1888

Post Master hands to Institute 183

Transferred to Natal Tech. College 194

Page No.

Johnson, Dr Lindsay

K:

Killie Campbell Museum (Durban)

Dr Campbell's Obituaries 192

Kirkness, Dr.

Arranges meetings at Observatory 191

G:

Gahan, Canon

Speaks on Solar System April 1947 200

Recollections by parishioners 211

Girl Guides

Receiving astronomical tuition 198

Grubb 8-inch refractor:

Handed over from City Council 184

Transferred to University, 9 Sept. '48 202

Dismantled and taken to University 205

Lens removed by Secretary Robertson 205

Tube etc., sold as scrap 206

Lens thought to be in Zambia 215

H:

Hailpern Mr Egmont

Publishes article, telescope making 204

Halm, Mr H G

```
Halm, Prof. Dr.,
        Gives lecture on "Luminosity" 191
Harvard College
        Constructing Bloemfontein Observ. 194
Historical Site
        Observatory site declared as such 216
Horrocks (Cape Town)
        Visits Durban, pushes for amalgamation with "ASSA" 197
Hoyer, Mr A G (Engineer and Broker)
        Hands over set of Cape Rules 185
        At "N.A.A". foundation meeting 187
I:
Innes, Dr. (Union Astronomer in Johannesburg)
        Hands over Transit telescope 183
J:
James, Revd.
        At Natal Astr. Ass. meeting 187
Jones, Dr Humphrey E (Late Principal of Tech.)
        Recollections
Knight, Lt.Commdr. A W, RNR
```

Lectures on Nautical Astronomy 193

Secretary of Observatory C'tee 184

L:

Lennox Mr C W Elected to College Committee 194 Luyton, Dr W J (Bloemfontein) Lectures on Grootfontein Meteorite 194 **M**: Mason Mr H C Worked under Nevill 200 Lectured on "Moon" in 1929 200 Moir, Dr. (Johannesburg) Wants to observe Mars from Durban 190 **Moore, Dr Patrick (England)** Recollections 213 N: Natal Astronomical Association ("N.A.A.") Formed on 19th May 1922 187 Winds up in 1932 197 Becomes the "Natal Centre" 197

Natal Midlands Centre

Preliminary meeting in P'M'Burg 215

Centre formed on 28th March 1974 215

Naval Hill Observatory (Bloemfontein)

Home of 261/2 inch refractor 194

| Neal Mr J H, Dean of University | |
|---|-----|
| Writes to PMB re condition of Obs. 204 | |
| Neison, Crater | |
| Named on Moon, Lat 63N, Long 17W 213 | |
| Nevill, Mr Edmund | |
| Death in England 13 th January 1940 199 | |
| Nevill, Mr Guy | |
| Son of Edmund 213 | |
| Nevill, Mrs Mabel (Wife of Edmund) | |
| Outlives her husband 199 | |
| Death of in 1958 at age 93 213 | |
| | |
| | |
| | |
| Page | No. |
| | |
| Nevill, Miss Maud (Eldest child of Edmund) | |
| Recollections including death of father 212 | |
| Visits Durban 216 | |
| Opens exhibition on 23 rd March 1977 216 | |

Nevill, Mr Ralph

Son of Edmund, dies in 1961 213

0:

Observatory, Durban

Poor condition 182 et seq.

Control passed to Natal Astr. Ass. 195

Move to transfer to University 201

Roof covering off, severe damage 204

Condition now dangerous (10/8/53) 205

Vandals break in, items stolen 205

Grubb telescope dismantled 205

Demolished November 1957 206

Ground declared "Historical Site" 216

Observatory Association

Receives assets from Natal Society 191

Ottens, Mr Hein

Chairman of "new" Centre (1957) 206

Publishes book on Telescope making 214

P:

Palmer, Mrs Mabel

On committee for visit of Brit.Assoc. 194

Parakevopoulos Dr

In charge, Harvard Obs. Bloemfontein 200

Gave lecture in Durbnan March 1947 200

Park-Ross, Dr

Arranges meetings at Observatory 191

Periodicals:

"The Observatory" 189

Planetarium for Durban

Failed attempts to get one 215

Pullin, Mr T C On Observatory sub-Committee 184 Gives lectures in Durban 185 **Q**: R: Radio Association of South Africa First mention of 193 Rangers Receiving astronomical tuition 198 Rees, Wynn M A, "Tech." book published in 1957 182 Page No. Roadknight Mr H Keeps Observatory open each week 192 Roberts, Mr Gregory Takes last photo of Observatory 1957 206 Recollections as Secretary etc., 211 Starts up University Rocket Society 214 Member of Durban Satellite Tracking 215 Assists in start-up of Centre 215 Roseveare, Prof. Works on telescope 182

Gives lectures in Durban 189

Scogings, Prof.

Rescues the Transit telescope 205

Recollections 209

Schriber Mr (Surveyor)

Assists repairs to telescope 182

Schuddeboem Prof F J (Dept. Mathematics)

Uses Grubb telescope frequently 204

Short (Arts Department)

Sub-Committee for re-siting 'scope 182

On Observatory sub-Committee 184

Smith, Mr J J, Builder

Quotes for repairs 201

South African Association for the Advancement of Science and Art

Referred to as the "S2A3" 191

Spencer-Jones Dr (Astronomer Royal)

Wickes meets him in the U.K. 194

Starman's Badge

Boy Scouts 194

Survey Department, Univ. Of Natal

Newly formed circa 1948 201

Strutt, Mrs Daphne (Curator, Local History Museum)

Might have saved Observatory 209

Responsible for research not noted

Recollections 209

| Т: | |
|------------|---|
| Teache | rs' Training Centre, Durban |
| | Used for highly successful meetings 215 |
| Transit | t Telescope |
| | Re-installed in Durban 183 |
| | Bolted down on new bedplate 184 |
| | Handed over to Natal Tech. College 194 |
| | Rescued by Prof. D Scogings 205 |
| | |
| | |
| | |
| | |
| | Page No. |
| U: | |
| | |
| Univer | sity of Michigan |
| | Constructing Bloemfontein Observ. 194 |
| | |
| V : | |
| | |
| Van de | r Merwe, Mr |
| | Government Entomologist 184 |
| | |
| W : | |

Walker, J M Quot

Quotes for repairs 197

Westcott, Dr Wynn

Death of in 1926 192

Wickes, Mr C F, FRAS (Also as "Wicks")

On Observatory sub-Committee 184

Repairs clock drive system 184/5

Takes good photos of Moon 185

Lecture on Nevill's "First Minutes" 191

Resumé of his life 193

Death of on 19th August 1973 193

Wood, Mr H E, F.R.A.S.

of Johannesburg (Union) Observ. 184

visits Durban from Johannesburg 190

now Chief Assistant at Union Obs. 190

visits Durban again in 1825 191

now Union Astronomer 194

X:

Y:

 \mathbf{Z} :