



Editorial

The Quiet Life - I

Clarence Augustus Chant, Founder of the Department and of the Observatory, spent a few years in his early eighties writing his autobiography. He then submitted it to the University of Toronto Press for an opinion as to its suitability for publication. Mr. Marsh Jeanneret, now Director of the Press, told him in a very kind way that the manuscript did not have sufficient general appeal to warrant publication, but he suggested that the Press would gladly publish the last chapter dealing with Dr. Chant's role in promoting astronomy at the University. This was printed in 1954 under the title of "Astronomy in the University of Toronto". There is a copy in our library to which we often refer for details of the terms of the Dunlap bequest and of the Observatory.

As far as I know there are only two typescript copies of the complete 846-page Autobiography. One belongs to Dr. Chant's daughter, and the other was left in my care and is kept in the Observatory vault. I have recently been re-reading it. I believe we should prepare a bound copy for the library; as a document of life in a small Ontario community just after Confederation, and of academic life in the developing years of the University of Toronto it will hold more and more interest as the years go by.

"Gus" Chant was born about seven miles east of Richmond Hill at Hagerman's Corners in 1865. His father, who had come from England to St. Catharines in 1841, learned the trade of cabinet making there, then moved to Hagerman's Corners and, after a few years to the nearby larger village of Unionville. While life wasn't exciting in a small village, it wasn't dull either for a boy with a love of nature and a thirst for learning. Dr. Chant describes incidents at school in incredible detail: such as how, when he was 12, a girl named Barnes eliminated him in a spelling match by spelling vermeil correctly, where he had reasoned its spelling to be vermil from "vermillion". But Gus had his revenge a few months later when he downed the Barnes girl on "scurrilous" and became Township spelling champion and won a five-volume work on Shakespeare, Tennyson, Campbell, Coleridge and Bunyan (what a combination!).

Being so obviously a scholar, young Chant was sent to High School in Markham, then conducted in two small rooms in the top floor of a local merchant's building, one room for the headmaster and one for his assistant - each with about a dozen pupils. (The Assistant, one Allan McLean, was said to hold a Ph.D. from Giessen University in Germany). The subjects were Latin, French, English, arithmetic, algebra, Euclid, History, geography and "scraps" of science (statics and chemistry). There were some options, the boys normally electing Latin, the girls French. Chant walked three miles from his home to school; some walked six.

After two years of high school Chant passed his Ontario Intermediate examinations and started Upper School, adding Greek to his subjects. At the beginning of his fourth year the Headmaster resigned to become Secretary of the Speight Wagon Works in Markham (a sort of local brain drainage), and Dion Cornelius Sullivan (LL.B. Trinity College, Dublin) was appointed Headmaster. This man had some knowledge of astronomy and talked up the forthcoming transit of Venus of December 6, 1882. No doubt it would have been a satisfaction to Chant to say that this event sparked his lifelong interest in astronomy, but, with the candour which characterized his whole life, he admits that on the day of the great event he happened to be absent from school and completely forgot it. At the same time he tells (perhaps with some satisfaction) that Mr. Sullivan "gazed for some hours at the sun through smoked glass, with and without his spectacles, but could not detect the planet".

Needless to say, Chant had no further opportunity to see a transit of Venus, the next one being in 2002; and ten years were to pass before he would take any particular interest in astronomy.

(to be continued . . .)

J.F.H.

OBSERVING

Las Campanas

Bill Harris returned last week from Las Campanas where he conducted the first observing run with the 24-inch. Here is how he described it to D.D.D.

On a photographic run of 22 nights, I took a total of 107 plates, and was prevented from getting many more only by various small technical problems, a succession of power failures, and several days of cloudy and partly-cloudy weather. The telescope is a superb instrument for photography and produces beautiful plates of globular clusters, open clusters, and nebulae, and Dr. Walborn's upcoming observing run ought to demonstrate the same result for galaxies too. The combination of completely clear sky, good seeing, and a brand-new mirror make it possible to reach well below $B = 19^m$ and $V = 18^m$ in exposure times of one hour. In

particular, a 75-minute exposure of the NGC 121 field taken on Aug. 29 reaches $B = 20\text{m}5$!

During the three weeks of my run, 13 nights were photometric, five were spectroscopic, and four were unusable. This seems to have been the worst period of observing weather on Las Campanas for many months: clouds began to encroach as soon as the installation of the telescope was complete and Dr. Racine had left, and another big snowstorm hit the ridge (La Silla and Cerro Tololo also) on Sept. 9. The main weather problem was the wind, which regularly comes in from the north and sweeps around the dome at great speed.

The quality of the seeing at Las Campanas is remarkable. I found that the average seeing disc was close to 1.0 arc second, and on at least two occasions the seeing stayed at about one-half second all night long! (These are not just frivolous eye estimates, because the new Ealing 24-inch has a stepping motor for guiding in declination which allows the seeing disc to be measured during focus tests).

The major and most frustrating problem on the site has been the lack of reliable electric power, but this has now improved considerably. The generators finally seem to be stable enough to permit routine operation of the telescopes. Las Campanas is clearly going to be an exciting place to observe!

COMINGS AND GOINGS

Dr. Nolan Walborn attended IAU Symposium No. 49 on "Wolf Rayet and High Temperature Stars" in Buenos Aires, Aug. 9-14. He is now at Las Campanas for a two-week observing run on the photography of galaxies.

Dr. Garrison will go to Las Campanas early in October to install his new image-tube classification spectrograph; then he will hop across the Andes to attend IAU Symposium No. 50 on "Spectral Classification and Multicolour Photometry" in Cordoba, Argentina, Oct. 18-24.

Dr. Christine Coutts on a card mailed in the Soviet Union on Sept. 10 tells that she spent a few days in Armenia, visited Turkey then the U.S.S.R. and was returning to Turkey. She is expected back here in a week or so.

Dr. van den Bergh spoke at the NASA - Ames Research Centre on "The Observations of Distant Galaxies" on Aug. 17, and on "The Stellar Population of the Galactic Nuclear Bulge" at the University of California at Santa Cruz on Aug. 18 and at Berkeley on Aug. 19.

When Dr. Anand was in Mexico he gave a colloquium on "Fission Theory of Binary Stars" at the University of Mexico on Aug. 11.

Titles of papers read by DDO delegates at the Bamberg Conference on Variable Stars in August were:

Dr. Fernie: "Photometry of R CrB".

Dr. Percy (with Kathy Madore) "Stothers and Simon's Binary Star Hypothesis of β C Mi star Pulsation"

Dr. Coutts: "Effect of Binary Motion on Period Changes in RR Lyrae Stars".

SEMINARS

August

Contrary to last month's mis-statement there was one seminar: Dr. van den Bergh on Aug. 10 on "Stellar Populations in the Nuclear Bulge of the Galaxy".

September

Sept. 14, Dr. Racine on "Completion of the Las Campanas Telescope Installation".

Sept. 15, Dr. John Whelan, University of Sussex, on "Structure of Contact Binary Systems".

Sept. 28, D.D.O., Dr. Garrison on "The Moderately Old Cluster NGC 752".

October

Tues. Oct. 5 Dr. Gustav Tammann, Hale Observatories and Basel Univ.,
DDO "Recent Work on the Cosmological Distance Scale".

Tues. Oct. 12 Dr. Anand, "Gravitational-Spectral Stark-like Effect".
DDO

Thurs. Oct. 14 Prof. Parker, University of Chicago,
McLennan, "The Origin of Magnetic Fields".
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Tues. Oct. 19 Dr. Sanyal, "Spectroscopic Studies of Nova Delphini 1967".
DDO

Tues. Oct. 26 Dr. Walborn, title to be announced.
DDO

PAPERS SUBMITTED FOR PUBLICATION

- S. van den Bergh "The extra-galactic Distance Scale - An Interim Report".
- "Nebulous Objects near Maffei No. 1"
- "The Stellar Population in the Nuclear Bulge of the Galaxy "
- "The Strange Case of V605 Aql"
- "UBV Photometry in the Nuclear Bulge of the Galaxy".

MISCELLANEOUS

SvB Joins Ap. J. Board

Dr. van den Bergh has been elected for a five-year term to the Editorial Board of the Ap. J. effective Jan. 1, 1972.

New Post-doc. Fellow

As of Sept. 15 Dr. Ashit Senyal is a new Post-doctoral Fellow in the Department. Dr. Senyal obtained his Ph.D. from the University of Texas, having previously been Assistant Astronomer at U.P. State Observatory, Nanital, India. His thesis topic was "An Analysis of the Spectra of Nova Delphini". He will be working with Dr. Clement and Dr. Anand on model atmospheres of rapidly rotating stars and on studies of close binary systems; he is also interested to have some observing experience with the 74-inch telescope.

New Observing Assistant

Rick Salmon has been taken on as an 80% of full-time observing assistant on the 74-inch. Rick has been in the astronomy program at the University and during the fall term will be taking one course for the completion of his B. Sc. degree.

New Graduate Students

The following are the newly reported astronomy graduate students and their places of origin:

Bruce T.E. Campbell, U.B.C.; Martin J. Duncan, McGill; Dean D. Hess, Penn. State; John D. Roger, Dalhousie; Roslyn E. Shemilt, U.N.B.; Philippe M. Teillet, U. of Ottawa; Norman K. Udey, U. of Alberta.

Besides these there are the three U. of T. graduates who commenced graduate studies during the summer: Blake F. Kinahan, Kayll Wm. Lake and Michael M. Shara.