



## EDITORIAL

An Early Canadian Telescope

Professor Roger Leclaire, S.J., of the Institute of Astronomy of Laurentian University has written to draw my attention to a remarkable achievement of early Canadian astronomy of which I hadn't been aware. This was the design and construction, about at the turn of the present century, of a 20-inch reflecting telescope by Rev. F. Gervaix, S.J., and his colleagues of the Jesuit College of Montreal. At the time of its completion it was the third largest telescope on the continent, ranking behind the Yerkes and Lick refractors.

The construction of the telescope is described in *Scientific American*, vol. 89, p. 60, 1903, with copious illustrations. The blank was roughed out to a sphere with a rotating cast iron disk fed with sand, and the paraboloidal figuring and polishing was done by the usual walking-around-the-barrel technique. Its final weight was 150 lbs., focal length 10 ft. 10½ in. The 12-foot tube was constructed by rolling 250 lbs of glue-painted paper around a wooden mould; its final weight was 350 lbs. and it was "very sturdy". The telescope, of total weight 1200 lbs., was mounted equatorially, the gear having been made by Garth and Co. and Belanger of Montreal.

Father Gervaix was born in Europe ten days before our Confederation, moved to Canada about 1900 and spent the rest of his life here. For his accomplishment in telescope making, if for nothing else, he deserves a place in the history of Canadian astronomy.

J. F. H.

### The 74-inch

Another 8 per cent gain in the speed of the G12 spectrograph may be expected to result from the removal of the GQ 18 filter from in front of the slit. The purpose of this filter for the G10 and G40 was to cut out the fourth-order wave lengths in the neighbourhood of 3600A which would overlap the desired 3rd order 4800A. The G12, operating in the 2nd order, does not require this filter, but we must remember to re-install it whenever we go back to the G40 (or the G108 if we want to use it as far as H $\beta$ ).

We could gain another few per cent in speed by arranging the mirror for the exposure meter so that it could be taken out of the light beam for a measured fraction of the exposure. Any other suggestions?

It is to be hoped that one of the winter impediments to 74-inch observing has been eliminated by the installation last week of heaters on the shutter rails to prevent or clear the accumulation of snow and ice. Until some experience has been gained, the technical staff will look after the operation of the heaters during snow and ice storms.

### The 19-inch

Tom Barnes is being held up on his IR research as a result of an air leak into the cooling chamber for the photomultiplier which introduced moisture and apparently damaged the tube.

### October Seminars

Seminars in October were as scheduled in the last issue except that Dr. Kronberg spoke on Oct. 23 in place of Dr. van der Laan, and the latter spoke on "The Radio Variability of Extragalactic Sources" on October 17 and on "Frequency of Selection, Spectral Index Distribution and Source Counts" on October 18. Today Dr. Allan F. Saaf of the Goddard Institute of Space Studies is speaking on "A Formal Third Integral in a Nearly Spherical Stellar System"

### November Seminars

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| Nov. 6<br>Observatory<br>Countdown                                  | Chalmers Hardenbergh: "Infrared Astronomical Observations".<br>Robert Hawkins: "Iron Variations in 73 Drac".                                    |
| Nov. 13<br>Observatory<br>Countdown                                 | Dr. Hong-Yee Chiu, Goddard Institute for Space Studies and State University of New York at Stony Brook: "Cosmological Models for our Universe". |
| Nov. 20<br>Observatory<br>Countdown                                 | Dr. Anand: "The Equilibrium and Stability of Magnetic Stars".   |
| Nov. 21<br>Physics and Astronomy<br>Colloquium, Room 102, McLennan. | Dr. Thomas Gold, Cornell University: "Pulsars".   |

Nov. 27  
Observatory  
Countdown

Dr. J. M. Greenberg, Leiden Observatory and  
Rensselaer Polytechnic Institute: "Interstellar  
Grains".

Course G2000: Seminars in Astrophysics

Room 202, McLennan  
Thursdays at 4 p.m.

- Nov. 7 Carl Bignell: "Identification of Quasi-  
stellar Objects".
- Nov. 14 Hugh Ross: "Application of Phase Coherent  
Interferometry to Astronomy".
- Nov. 28 Bill Dodd "Diffuse Interstellar Lines".

Papers Submitted in October

"Zur Zeitlichen Variation des Metallgehaltes in der Galaxis",  
by K. H. Schmidt and S. van den Bergh" - accepted for publication  
in Astron. Nachr.

"UBV Observations of Field Galaxies" by R. D. McClure and S. van den Bergh.

COMINGS AND GOINGS

The following attended the scientific sessions of the National  
Committee for the I.A.U. in Ottawa on October 4-5 and at the A.R.O.  
on October 6. Drs. Fernie, Garrison, Heard, MacRae, Roeder, Seaquist  
and van den Bergh. Papers were presented by Dr. Roeder on "The  
Absorption Spectra of Quasi-Stellar Objects", by Dr. van den Bergh on  
"Recent 200-inch Observations of the Globular Clusters in the  
Andromeda Nebula" and by Dr. Seaquist on "The Radio Spurs as a  
Single Helical Feature".

Dr. MacRae was in Ottawa on October 25 to attend a meeting of  
the Council of the Royal Society of which he is a member.

Dr. van den Bergh spent October 23 at the Observatory en route  
to Holland for a family re-union in honour of his father's 70th  
birthday and was here again on the 28th en route back to Pasadena. He  
will be here again on family matters during the week of November 11.

Dr. Fernie will be in New York on Friday of this week for a  
meeting of the A.A.S. Committee on Education in Astronomy.

Dr. Hogg returned last week from a short autumn holiday at her  
home in Dunstable, Mass.

### Obituary

We have learned with regret of the sudden death on October 26 of Dr. Marshal Wrubel of the Goethe Link Observatory, Indiana University. Dr. Wrubel, well known for his contributions to theoretical astrophysics, was known personally to many of us, having visited here several times. His untimely death is a great loss to astronomy. Our sympathy is extended to his family and colleagues.

### Married

Frank Hawker's many friends among staff and students rejoiced to hear of his marriage on October 9 to Joan Hudson of Richmond Hill. Frank and Joan are living at 73 Yongehurst Ave. Our congratulations to Frank and our best wishes for much happiness to Joan.

### Mugging of Graduate Students

All students who have not had their mugs shot by Ansen Moorehouse are requested to do so without delay.

### Visitor

Mr. Chet Wheeler of Boller and Chivens spent last Thursday morning at the Observatory seeing our equipment and showing us the B and C. line of astronomical spectrographs. Our mouths watered, but where do we find the kind of money necessary?

### Alumni

Word comes from Doug and Joan Hube that they have been living with Bob and Lyn McClure while awaiting their own apartment in Tucson at the end of the month. Each of them has had three nights on the 16-inch already. Also Doug is busy writing papers and solving binaries.

### Bochum Publications

Of special interest to us because of our acquaintance with Dr. Schmidt-Kaler is his recent announcement that the Astronomical Institute of the Ruhr-Universität Bochum is beginning a series of "Publications" and of reprints from less well known journals. We should watch for these in the Library.

### Extramural

Dr. Percy addressed the Canadian Club of Lindsay on September 30 on the topic of "An Up-to-date Look at the Moon". The moon, clear skies, and his telescope were fortuitously present. He is also continuing his series of displays and talks at the Toronto Public Libraries, childrens' branches. Fifteen branches will participate; an estimated 15,000 children will see the displays, and 1,000 will hear the talks.