DAVID DUNLAP DOINGS

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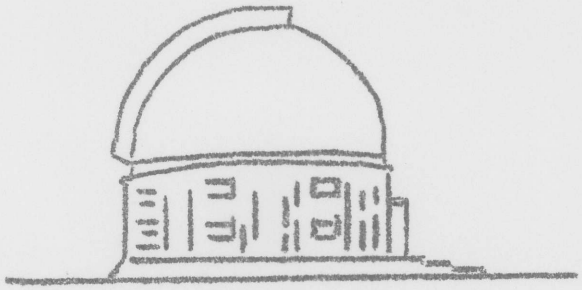

EDITORIAL

The Great Fire of May 16, 1951.

It was mid-afternoon of May 16, 1951. Gerry Longworth had been working on the 74-inch telescope, when Barry Gunn (Secretary-Librarian and night assistant) brought over a group of school children. Gerry went for a coffee and when the demonstration was finished he returned to his work. The generator had been going all the while, but Gerry was now aware of a crackling sound from below and started down the stairs to investigate. As soon as his head was below ceiling level he saw flames shooting from the gutters which carried the wires from the electrical panels to the conduits leading to the observing floor.

At that moment the dome-turning motor began to run and Gerry rushed back upstairs to switch off the generator before the bridge would hit the telescope. He flipped the toggle switch, but nothing happened - the generator still ran and the dome still turned. By this time the lights began going out as fuses began blowing with more and more of the wires, their insulation burned off, sagging and shorting.

Practically falling down the stairs, Gerry dashed behind the panels and groped through the smoke to the master switch in the circuit which brought the AC supply to the dome. Once this was pulled the generator stopped and the immediate danger to the telescope ceased to exist. But, fearing that the flames would work their way up through the conduits to do further damage on the observing floor, Gerry emptied the one fire extinguisher in the dome onto the flames and then raced to the administration building. There he shouted to Barbara Creeper, the Secretary, to phone the fire department, and he and Barry dashed back with another extinguisher each. These doused the flames, but the choking smoke of burned rubber was worse than ever. When the firemen came they entered the dome with smoke masks, made sure that the fire was out and opened the windows.

When we could survey the damage it became clear what had happened. Overheating of a hold-down coil had ignited the relatively old rubber insulation. As the wires sagged and crossed the dome-turning motor was energized and the cut-off switch for the generator was shorted out.

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The whole dome had to be rewired, of course, This turned out to be a big job because, strangely, no wiring diagram existed. It took a team of University electricians a month to rewire - this time with "Flameseal"! The cost was $3000, and the insurance policy did not cover fire damage to electrical wiring and equipment. However, the Comstock Co., which had just previously converted the Observatory from 25 to 60 cycle, accepted one-third responsibility for the faulty hold-down coil, as did the Square D Co. which had rewound this coil under contract, and, for some reason, as did also Ontario Hydro.

It could have been worse. No one but Gerry at that time knew the location of the master-switch. (Its extension onto the observing floor was a later precaution.) Had it not been he who was in the dome, the telescope might have been seriously damaged. Furthermore, had the fire started ten minutes earlier with the children in the dome, there might have been panic and injuries.

As it was we lost five weeks observing.

J.F.H.

OBSERVING

Improvements to the Dome

Two of them, one decorative, one useful. The large aluminum casting of the U. of T. coat-of-arms which Gerry has been burnishing and painting during the winter now graces the south point of the outside cat-walk and looks very fine. In the aluminizing room and clear across to the west side of the dome, Dominion Bridge workmen have fitted an I-beam which may be rolled out through a recess in the bridge between the piers when needed to carry the gantry crane for lifting the mirror. This replaces the old time-consuming and hazardous practice of mounting and unmounting the I-beam extension onto the ceiling of the aluminizing room . Gerry figures that this improvement will cut the down-time for aluminizing to one night.

Dial-a-slit

The plunger which controls the slit length of the grating spectrograph has been fitted with a lever-action pointer and a scale. The scale is calibrated in terms of spectrum width, and it is possible to choose widths from 0.3 to 1.2 mm. And, by the way, we should remember that the slit width dial reads tens of microns. Thus our normal slit width of 9 for the 12A/mm dispersion means 90 microns or, in terms of projected slit width on the plate, about 23 microns (the collimator and camera focal lengths being 72 and 20 inches respectively).

COMINGS AND GOINGS

Dr. MacRae was in Washington on April 24 on Universities Space Research Association business.

Drs. MacRae, van den Bergh and Garrison were in Ottawa on April 17 in connection with the Observatory's 24-inch telescope installation in Chile. (A report on the progress of this project in our next issue).

Dr. Heard gave a colloquium at Allegheny Observatory, Pittsburgh, on April 3, on "Selection of Faint Standard Velocity Stars".

Dr. Racine reports as follows on his observing session at Palomar earlier this month:

"I was scheduled for four nights - April 2 to 5. All four were completely clear nights with fair to excellent seeing. Clouds cleared the day I came and a storm was building up the day I left. I ran away with 48 direct plates mostly of Virgo galaxies for a study of their globular clusters population. Comet Bennett was high and bright in the morning twilight and I could not resist looking at it with the "Big Eye" on my last morning. Fabulous sight! Took 2 short exposures of it; now on display at the Observatory.

T'was a grrreat run! "

Dr. Chris Coutts returned from Chile yesterday. She had a very good run and got two extra nights at the end. She reports losing 1½ hours to clouds on her twelfth night.

SEMINARS

APRIL seminars were as announced except that there was an additional Countdown on April 7 when Dr. van den Bergh reported on "A Jet-like Structure associated with the Crab Nebula" and Barry Madore reported on the Symposium on "Globules, Dark Nebulae and Protostars" which he attended at Tucson on Mar. 26-27.

MAY SEMINAR

A joint colloquium has been arranged with the Department of Physics for May 21 at 4.10.

JUNE INSTITUTE

A detailed program for the June Institute is now available. Copies are included with this mailing of the Doings.

PAPERS SUBMITTED IN APRIL

Check-Sen Chai and S. van den Bergh, "Supernovae in a Random Sample of Galaxies".

Barnes, T. and Evans, N. "UBV Photometry of Nova (HR) Delphini 1967".

S. van den Bergh and W.W. Dodd. "Optical Observations of the Supernova Cassiopeia A: I Proper Motions in the Optical Remnant".

LETTERS TO THE EDITOR

Sir:

May I respectfully point out that the announcement of our daughter's birth (DDD 3, #3, p. 4) should have read:

BORN: To Dr. and Mrs. Rene Racine on March 3 at St. Michael's hospital, a daughter, Julie.

Surely my being away at Palomar must have greatly contributed to the entropy increase of this announcement!

Sincerely yours,

Rene Racine

Sir:

In an interesting letter to this journal (vol. 2, no. 9, 1969), Dr. Henry King pointed out Sir John Herschel's noting the red colour of 47 Tuc in 1837. Dr. King remarks on this being the earliest reference to Population II stars of which he is aware. I am happy to be able to push the record back another half-century.

In his paper "On the Construction of the Heavens" read to the Royal Society in February 1785, Sir John's father, William Herschel catalogues some noteworthy nebulae:

The ninth is that in the girdle of Andromeda, which is undoubtedly the nearest of all the great nebulae... The brightest part of it approaches to the resolvable nebulosity, and begins to shew a faint red colour; which, from many observations on the colour and magnitude of nebulae, I believe to be an indication that its distance does not exceed 2000 times the distance of Sirius. There is a very considerable, broad, pretty faint, small nebula near it; my Sister discovered it August 27, 1783, with a Newtonian 2-feet sweeper. It shews the same faint colour with the great one, and is, no doubt, in the neighbourhood of it.

So far as I am aware, this is also the earliest scientific estimate of the distance of M31.

Yours sincerely,

J. D. Fernie

Sir:

I would like to supplement your excellent editorial on Sir John McLennan in the issue of March 31 with the following information.

In regard to the identification of the auroral green line at λ5577, this was made by McLennan and his student Gordon Shrum in 1925. A report of the discovery is given by H.J.C. Ireton in J.R.A.S.C. vol. 19, pp. 289-292, 1925.

A little biographical material on Shrum is not amiss. While McLennan seems to have absorbed the credit for the green line identification, Shrum has managed to lead a full life, and has an entire page in "Who's Who in Canada", p. 692 of the 1969 edition. He is currently Chairman of the British Columbia Hydro & Power Authority, and is (or has been!) Chancellor, Simon Fraser University. From 1938-61 he was head of the Department of Physics at UBC, and Dean of the Faculty of Graduate Studies, 1956-61.

I remain, Gentleman,

Respectfully yours,

April 1, 1970. Helen Hogg

Sir:

I enjoyed reading your editorial of March 31 on Sir John Cunningham McLennan. It may interest you to know that my home-town newspaper "The Stratford Beacon-Herald" still occasionally refers to the exploits of the "great scientist from Stratford".

As a former low temperature physicist, however, I must take exception to your spelling "kryogenics"; it is actually "cryogenics".

Finally, I should mention that the partial eclipse of last month was also observed at Scarborough College by students in Astronomy A1 and B1 together with a steady stream of visitors, probably numbering 75-100 in all.

I remain, Sir,

Respectfully yours,

Mar. 31, 1970. Robert C. Roeder.

The Editor thanks these correspondents for corrections and interesting supplemental information. He has tried hard to find some excuse for the mis-spelling "kryogenics" and the best he can do is to quote from the Concise Oxford: "kryo: a variant sp. of the prefix cryo".

J.F.H.

MISCELLANEOUS AND PERSONAL

Born

To Dr. and Mrs. Philipp Kronberg on April 9 a son, Paul Andrew.

Resignation

Gloria Evans resigned her post as assistant secretary on campus as of April 9.

Retirement

After eight years of most valuable service as Librarian, Mrs. Lehmann is retiring at the end of this session. Mrs. Lehmann was the first graduate librarian in the history of our library, the duties of librarian having been carried out previously by a succession of secretaries, and, quite understandably, the arrangement, catalogues and records left much to be desired. Thanks to her efficiency the faults have been corrected, and at the same time, thanks to her kindly and helpful ways, the books and periodicals have become increasingly accessible to us all. We shall miss her and we thank her very much.

Appointments

Mrs. Sheila Smolkin, a recent graduate of the U. of T. Library School, has accepted an appointment as full-time librarian, replacing Mrs. Lehmann. She will report for duty in mid-June.

Post-docs

Tom Bolton who is to receive his Ph.D. from the University of Michigan this summer has accepted a Post-doctoral Fellowship here commencing in September. He will work with Drs. Garrison and Heard.

Tom Barnes has accepted a Post-doctoral Fellowship at the University of Texas. Tom hopes to finish his thesis before the IAU assembly and to have his examination in September and then report to Texas.

Hans Fast, who will receive his Ph.D. in the Department of Physics in June, has accepted a Post-doctoral Fellowship at U.B.C. He will work there with Dr. Ovenden on the Spectra of Molecules in cool stars and expects to obtain his observational material at the D.A.O.

Talks

Dr. MacRae spoke on April 14 to the U.C. Alumni on "The Moon" in the R.O.M. Lecture Theatre.

Dr. Racine spoke on April 24 to the Toronto Centre of the R.A.S.C.

Dr. Heard spoke on "The History of Navigation" to the Niagara Falls Centre of the R.A.S.C. on April 16.

Dinner

Dr. Hogg entertained the Past-President of the Royal Canadian Institute and their wives at dinner at the University Women's Club on April 25 just before the Annual Conversatsione. Of the 18 living Past-Presidents, 16, including Dr. Hogg, were present.

Lost

Ursula Dewsbury has lost a sterling silver bracelet with an inscription on the inside. She believes she lost it either April 14 or 21 while preparing tea in the kitchen - in any event in the Observatory somewhere. She will greatly appreciate everyone keeping an eye out for it.

Elected

Dr. Heard was elected Vice-President of the Board of Governors of the York Regional School of Nursing at the annual meeting of the school on April 23.