

DECLINE OF AN OBSERVATORY*

J. N. SINHA**

An observatory in Muzaffarpur, which had “excellent astronomical equipment”, has been allowed to go to rack and ruin and sink into oblivion.

Inconspicuous in the midst of massive trees with frills of red gulmohur and yellow amaltas, the majestic facade of Langat Singh College in Muzaffarpur, Bihar, is a curious sight. This sprawling structure was modelled on the early modern European style of Balliol College in Oxford, United Kingdom, which is outlandish for Muzaffarpur. The white metallic dome on its roof and the adjoining igloo-like masonry structure that stare one in the eye right at the entrance of the building complete the picture of a fairyland comic thriller. These dome-shaped structures, telltale signs of an era gone by, are the remnants of an astronomical observatory.



The white dome on the main office building of L.S. College, Muzaffarpur, Bihar. Photo: Photographs: By Special Arrangement

The Origins

The large dome rotates on a circular track and has a sliding opening on the top through which a telescope can

be focussed on celestial bodies. Under the dome, there were telescopes and other instruments used in astronomical observations. Just a little distance away is the planetarium. A miniature version of modern planetaria, it once had a machine that recreated views of the sky with stars on its arching ceiling. Both the observatory and planetarium are non-functional and closed now. But where are their machines?

There are conflicting stories about the origins of the observatory. Old students of L.S. College believed that the telescope was gifted to India by the British imperial government on the occasion of its victory in the First World War. However, college records tell a different story. According to them, in February 1914, Professor Romesh Chandra Sen of GBB College, as the college was known then, sought guidance from J. Mitchell to establish an astronomical observatory at the college. An amateur astronomer and the principal of Wesleyan College, Bankura in West Bengal, Mitchell responded

with detailed suggestions. Accordingly, the college acquired in February 1915 a telescope from England with a four inch object glass with a 1½ inch finder, a dewshade, and a rack and draw tube. More accessories, including an astronomical clock and a chronograph, were acquired in the coming months.

* Reprinted with permission from Frontline of October 26, 2018.

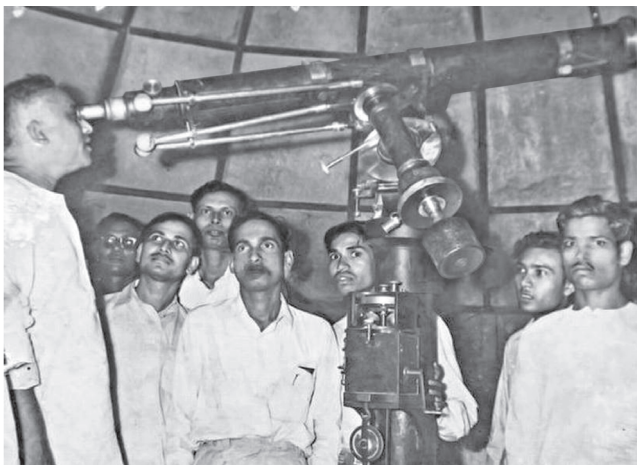
** Formerly Associate Professor of History of Science, University of Delhi, New Delhi, India, Email: jnsinha@rediffmail.com

The observatory was operational by the spring of 1916. On April 7, Mitchell congratulated the college authorities on their “excellent astronomical equipment” that only a few possessed and said he expected them to send him research findings in the future. Soon, they requested the Survey of India in Dehradun for the accurate latitude and longitude of the observatory. In December 1919, the Trigonometrical Survey sent them the coordinates of three points in Muzaffarpur town. Consultations took place also with the Mathematical Instrument Office, Calcutta (now Kolkata), and more instruments and accessories were added in following years.

Thus, observation and research work went on in full swing. The observatory interacted with the astronomical observatory at Presidency College, Calcutta, on such issues as difficulties in making observations, problems of “double stars” and “sunspots” and the paucity of literature on astronomy. Thanks to the enhanced activities of the observatory, the Department of Physics, which was in charge of it, appears to have attained some amount of autonomy by February 1920, as letters from the observatory now emanated from the “Physical Laboratory” instead of GBB College.

Meanwhile, a new building for the college was inaugurated on July 26, 1922. It was planned in such a way as to accommodate the observatory above the main office comprising the principal’s office and the college administration and the dome sits overhead like a crown. More equipment, accessories and literature were procured.

It seems to have had a significant upgrade in 1930, with the acquisition of such items as geometrical and mathematical models. In 1932, electrical connections were made between the chronograph and the astronomical clock. The remarks of S.M. Hussain, Minister of Education, Bihar



An astronomy class in session at the L.S. College observatory c.1949.

and Orissa, when he visited the observatory in December 1933, testify to the fact that it was in good shape at this time and functioning well. He described the college building as “magnificent... fit for a residential university” and took note of the “very fine observatory and... very good arrangement for the study of planets”. He considered it a “special gift” to the college. Was he referring to the imperial “gift” of the telescope after the First World War? No one has a clear answer.

One knows little about how the observatory functioned after 1933. However, the fact that a planetarium was added to it in 1946 indicates that it was doing well. The planetarium was fairly advanced for its time.

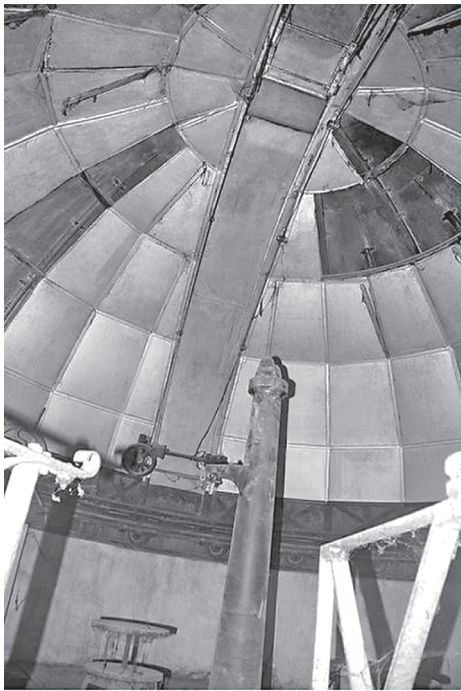
The observatory was also used in the BSc astronomy course in which students were taught how to operate the equipment and watch the sky. They could see all the planets of the solar system, the six satellites of Jupiter with its rings, the depressions on the moon’s surface, stars, comets and the Milky Way. Any happening in the sky could be recorded instantly with the help of instruments. The position of the stars published in *The Statesman* was used to make the nightly observations, sources testify.

After Independence

Ironically, there is less information about the observatory in the post-Independence period. There is no documentary evidence, or none readily available, with which to corroborate what one is told about it during this time. R.L. Verma was one of the professors-in-charge during this time, and he evinced considerable interest in it.

He was succeeded by Professor Sati Raman Prasad, who managed it until his retirement in the 1980s. The observatory developed some problem in 1963, which was rectified, and it worked for some years before things went haywire, and it slipped into oblivion.

I managed to get permission to enter the observatory after much effort around 1985 and was stunned to find the telescope and other instruments covered in dust and cobwebs and going to ruin in the musty air, a typical scene from a horror movie. No one would believe that they had all been working until recently. Curiously, the telescope I saw was a much simpler machine (about five feet long) than the one whose photograph appears in this article. This picture, taken around 1949, shows an astronomy class in progress with an advanced machine befitting its description as an “imperial gift”. A few people on the campus believed that there were two telescopes. But where are they now?



Inside view of the dome. Photo: By Special Arrangement

Subsequently, I interviewed Sati Raman Prasad. He was happy that someone approached him in connection with his association with the observatory and recounted its history with zest but was sad, at the same time, to reflect on its fall. A little later, I visited the campus with the idea of reviving the observatory, hoping to accomplish this through a donation from a non-resident Indian from Bihar who had settled in the U.K. But the local response was extremely discouraging. Only a few people supported the

idea; others were indifferent or more interested in the prospective funds than in the restoration. A few were even hostile to the proposal.

Criminal Vandalism

Some equipment of the observatory was allegedly stolen around 1995, after which it was sealed. Meanwhile, the college authorities contacted a servicing agency to refurbish the old machine; in response, the firm offered to purchase it for Rs.1 crore and replace it with a more advanced telescope free of cost. Whether this story is true or not, it gives an indication of the market value of machines of this vintage. No wonder it is believed that most of the instruments were smuggled out over the years, which could not have happened without the connivance of insiders. Did the authorities take cognisance of the matter and report it to the police? No one is ready to say anything in this regard. Shocked after my 1985 visit, I wrote to the then Chief Minister of Bihar and to virtually all his successors since then but have got no response to date. Will the Bihar government probe the criminal vandalism of this precious piece of heritage and restore it to its past glory?

Established in 1899, L.S. College was a fine gift of the Swadeshi movement to the nation, and the observatory was an impressive part of the college. Some 1,500 years after Aryabhata established an observatory in Taregana near modern Patna, just about 100 km from Muzaffarpur, and made great findings about the cosmos, it is sad that this present-day observatory could not last.