

Lancashire mills and later established his own Empress Mills in Nagpur January 1, 1877. In 1896 he published a monograph on *Growth of Egyptian cotton in India* and sought to acclimatize Egyptian cotton in India. The inauguration (1893) of the Japanese Steam Navigation Co., the promotion of the Tata Iron and Steel Co. (1907), and the far-sighted inspiration of the Bombay hydro-electric schemes have been sufficient causes to accord Tata a foremost place among the pioneers of Indian industry.

While quietly doing many deeds of kindness, Tata never indulged in promiscuous charities which are but a temporary relief to the inefficient. Convinced of the deficiencies of higher education in India, he inaugurated in 1892 a scheme by which a few promising young Indians were sent to England to qualify for higher administrative and technical services. He was proud of his scholars, "Our young men," said he, "have proved that they can not only hold their own against the best rivals in Europe on the latter's ground, but can beat them hollow".

Tata realised that the course of study in the Indian Universities stifled originality and initia-

tive. His remedial plan took shape as an offer to Government of India on September 28, 1898 of property in Bombay estimated to yield an annual income of Rs. 1,25,000. He also deputed a promising young man, Burjorji Padshah, to European seats of learning to find out the most productive use for the endowment. "What advances a nation or a community is not so much to prop up its weakest and most helpless members as to lift up the best and most gifted so as to make them of the greatest service to the country," so said Tata and started with Padshah's provisional scheme to work out his remedial plan. Its final form took shape as the Indian Institute of Science, Bangalore, "an institution devoted to post-graduate study and research, particularly in science, and conducted with a view to the application of science to Indian arts and industries, with a constitution resembling that of a University.

Tata refused to accept the proposal that the Institution should be named the Tata University, though his contribution towards its establishment amounted to 30 lakhs of rupees. The Institute began its work July 24, 1911.

Tata died at Nauheim, a German watering place May 19, 1904.

ASTRONOMICAL NOTES

Solar Eclipse.—An annular eclipse of the Sun will occur on April 19, but the phenomenon will not be visible in India. The path of the annular eclipse lies towards the extreme north—in the Arctic Ocean and the north-west part of North America.

Planets during April 1939.—Mercury is in inferior conjunction with the Sun on April 3; and during the latter part of the month it can be seen low down near the western horizon at about sunset. Venus will continue to be visible as a bright morning star for nearly two hours before sunrise; it is slowly moving towards the Sun and becoming fainter. Mars, rising about midnight, will be well placed for observation during the late hours of the night; its brightness is increasing, the stellar magnitude being -0.2 at the end of the month.

Jupiter, although not in a favourable position for observation, can be seen as a morning star rising about a couple of hours before the Sun; on April 22, there will be a close conjunction of the planet with Venus which is worth observing. Saturn passes conjunction with the Sun on April 11 and at the end of the month, will be just visible near the eastern horizon.

A lunar occultation of interest, that can be observed in India is that of the first magnitude star Spica (α Virginis) which will occur on the night of April 4-5, about an hour after midnight.

Comet Cosik-Peltier (1939 a).—As indicated by the ephemeris, the comet became somewhat brighter. On February 8, the magnitude was 5.8, just bright enough to be seen with the unaided eye. The object was diffuse with a sharp nucleus, and had a conspicuous tail over a degree in length, which was well visible with even small instruments. At the time of closest approach to the earth, the distance appears to have been about 50 million miles. The comet has been moving rapidly in a south-easterly

direction from the constellation Cetus to Eridanus.



Comet Cosik-Peltier (1939 a)

Taken at the Nizamiah Observatory, Hyderabad.—Feb. 14, 1939. Exposure: One hour, ten minutes.

The Photograph was taken with a $4\frac{1}{2}$ inch astro camera attached to the astrographic equatorial. The images of stars in the region are shown as short trails due to the motion of the comet relative to the stars during the time the exposure was made. The tail appears to be about a degree in length.

T. P. B.