

even then. Mr. J. C. Conder * says the Babylonians of the sixth century B.C. believed the first Chaldean empire was established more than 3,200 years before their time, and it was certainly founded by men of Mongol race, whose language, called Akkadian, is found on the oldest records. Scholars have not yet come into thorough accord; one Dr. Hilprecht assigns 3,000 B.C. as the date of an inscription in cuneiform writing, which displaced Hittite hieroglyphics when Semitic races became powerful around Babylon, while a Dr. Oppert thinks it a thousand years later. However, the earliest Assyrian and Egyptian records come fairly close together, and there seems no prospect of tracing either further back than six or seven thousand years.†

The origin of astronomical studies is coëval with reason and observation, and a singular record of them appears to be found in the pyramids of Egypt. They seem to have had openings from which a passage led to the interior, so built that on a certain day the Sun or a given star could be seen from the recesses of the monument, as if shining down a tube. To such stars these pyramids are said to be "oriented." The most recent investigation of this interesting subject is to be found in the *Proceedings* of the Royal Society for last November, where Dr. E. A. Wallis Budge discourses on the Pyramid fields of the Soudan, which are especially important because while in northern Egypt the pyramids are oriented east and west, in southern Egypt and the Soudan, star worship is indicated. These tombs had on the south-east side a shrine or chapel, "into the innermost part of which the light from the celestial body to which it was oriented could enter. * * They consisted of two and sometimes three chambers with narrow doorways which served, like the various sights and sections of a telescope, to direct the rays of light from the celestial body to a given spot—that spot in the case of a pyramid being the centre of the shrine, where a figure of the deceased was placed." Now in these Soudan cemeteries, the star chiefly used as a "warning star" is Alpha Centauri, and it was so used from the XIIth dynasty, about 2,700 before Christ. As, owing to the precession of the equinoxes, the place of a star must change, the later tombs would have an orientation

* Scottish Review, October, 1899.

† The Chinese records do not much differ, for they state that the first Emperor Fohi reigned 2,952 years before Christ, and he, too, composed astronomical tables. The first King of the Indies is said to have lived 3,553 years before our era, and the astronomical epoch of the Brahmins is supposed to begin in 3,101 B.C.