

ing, and there is not a dull page from beginning to end of the volume.

Major Gurdon's work is the first of a series of monographs on the more important tribes and castes of Assam now being issued by the Government of that province. While Mr. Crooke deals with the broad outlines of the ethnology of the whole of northern India, this work is confined to a single tribe numbering less than two hundred thousand souls. Although they are so few, the Khasis are a race deserving special study. Half a century ago Logan showed their relationship to the distant Mons of Pegu and Khmers of Cambodia, but his researches lay hidden in a local magazine, so that, until Kuhn revived the question in 1883, it was the general impression that the tribe was an isolated survival from prehistoric times, whose language formed a distinct family by itself, and which had no connection with any other known race. The researches of Kuhn, and, later on, of Schmidt, have placed the whole subject on a new and sure footing. We now know that Khasi is a member of an important group of languages including forms of speech, such as Palaung and Wa, closely allied to Mon and Khmer, and also Nicobarese and the Munda tongues of India proper. Moreover, not only are the languages connected, but the speakers all possess the same racial characteristics. This language-group Schmidt has named the "Austro-Asiatic" subfamily, and he maintains that it is related to the "Austro-Nesic" subfamily spoken in Indonesia, Polynesia, and Melanesia—the two together forming, under the name of the "Austriac" family, the most widely spread collection of allied speeches upon the face of the earth. A special and minute study, therefore, of the speakers of one of the members of this great family is just now well-timed and of considerable interest, and Major Gurdon, the superintendent of ethnography in Assam, is exceptionally fitted to undertake the task.

For the benefit of those who are not familiar with Indian ethnography, it may be stated that the Khasis are a tribe inhabiting the Khasi and Jaintia Hills in the Indian province of (as it is now called) Eastern Bengal and Assam. They are surrounded on all sides by alien peoples, Tibeto-Burman and Aryan, and are believed to be a survival of a primitive Austro-Asiatic race that once occupied the whole of eastern India until they were conquered and dispossessed in prehistoric times by an invasion of Tibeto-Burmans. The tribal constitution is strongly matriarchal. Inheritance is through the female line, the youngest daughter being the chief heir of her mother; ancestral property can only be owned by women, and the only property which a man can possess is that which is self-acquired. The chief deities are all female. So is the sun, while the moon is represented as a man, and in the grammar and vocabulary the feminine element is much more prominent than the masculine.

Besides chapters discussing introductory and miscellaneous topics, Major Gurdon's work is divided into five sections, dealing respectively with domestic life, laws and customs, religion, folklore, and language. Each subject is treated in great detail, and the book contains much new and valuable matter not hitherto recorded. We may direct special attention to the account of the remarkable memorial stones, menhirs, dolmens, and cromlechs scattered over the country, and also to that of the curious custom of egg-divining (*βοσσκοπία*). The chapter on folklore is also most interesting. It contains a number of stories, both in the original text and in translation. These form part of a larger collection placed at the author's disposal by the Rev. Dr. Roberts, and we are glad to learn that there is a prospect of the entire series being published at some

future date. The full-page illustrations of the book are numerous and in their right places, and it is further enriched by an introduction from the accomplished pen of Sir Charles Lyall.

There have been Welsh missionaries among the Khasis for more than sixty years, and to them we owe the fact that the language has been reduced to writing. Under their fostering care the tongue of a once rude and barbarous people has been given an alphabet, a fixed system of spelling (based on Welsh), and a literature. It is now recognised by the Calcutta University as sufficiently cultivated to be offered as a subject for examination by candidates from Khasi-land.

We congratulate the Eastern Bengal and Assam Government on the successful inception of what promises to be a most interesting and useful series of monographs.

ASTRONOMICAL OBSERVATIONS IN PRAGUE, 1900-1904.

THE Astronomical Observatory of Prague, like many other similar institutions which might be mentioned, has its work considerably restricted by the fact that the city in which it is situated has



Tycho Brahe's Observatories. A, On the island Hveen (Uranienberg); B, in Wandsbeck; C, in Benatek; D, in Prague (Ferdinandum); E, in Prague (Curtius's House).

grown. The restricted horizon, the smoke, and the glare of the illuminated air all have tended, year by year, to cut down the amount of useful work such an observatory is capable of doing, and it is quite possible that the time will soon come when it will

be transferred to a site where its sphere of activity can be extended.

The volume¹ before us contains, therefore, some of the results of observations which can be carried out under such restricted conditions. Of these may be mentioned an excellent series of observations of the culmination of the moon and the crater Mösting A. The determination of the latitude of the observatory was also undertaken. The result obtained, namely, $50^{\circ} 5' 16''.02$, was in complete agreement with the value obtained by Prof. E. von Oppolzer from observations made in the period 1889 to 1899. Other work here described refers to the observations of Jupiter's satellites, Nova Persei, shooting stars, &c.

The appendix contains, further, a series of useful papers by Prof. Weinek. These, for the most part, deal with some graphical explanations of the theory of the sextant, precession, planet-transits across the sun's disc, cometary orbit determinations, &c.

October 24, 1901, being the 300th anniversary of the death of Tycho Brahe, some very interesting historical notes are given relating to his two years' activity (1599-1601) in Prague. The reader may be reminded that this celebrated Danish astronomer died in Prague, and in the Teynkirche there a handsome gravestone marks his resting-place.

During his lifetime Tycho Brahe had five different observatories, and these were situated (a) on the island of Hveen (Uranienberg), (b) in Wandsbeck, (c) in Benatek, (d) in Prague (Ferdinandeum), and (e) in Prague (Curtius's House). These are shown in the accompanying illustration, which is taken from one of several of the fine reproductions inserted in this volume.

Others to which reference may be made are a fine coloured reproduction, in colours, of Tycho Brahe from an oil painting in the Prague Observatory; the Belvedere of Ferdinand I. (Ferdinandeum), where he observed; the Teynkirche, where he was buried; his two sextants, and other interesting reproductions of the Prague of to-day.

The volume concludes with a useful summary of the chief lunar maps and photographic moon atlases, commencing with Lohrmann (1824) and finishing with W. Pickering's atlas which was published in 1903.

THE DISCOVERY OF STONE IMPLEMENTS OF PALÆOLITHIC TYPE IN VEDDAH CAVES.

DRS. F. AND P. SARASIN recently made an expedition to Ceylon for the express purpose of investigating the caves now and in past times inhabited by the Veddahs, to see whether any stone implements could be discovered. Their earlier researches proved the Veddahs to belong to a lower and older type than the other inhabitants of Ceylon, and it is conceded that they must represent the few remnants of the aborigines who were met with by the Sinhalese on their first arrival, and by whom they were called Yakas, according to the tradition preserved in the Mahawansa. Presumably, these autochthones were at that time living in their Stone age; but no record of Veddah stone implements occurs in anthropological literature. From an article in the *Ceylon Observer* of April 22, written by these indefatigable travellers, we find that on this, their fourth, expedition into the Veddah country they were lucky enough to find a cave near the village of Nilgala, which until very recently was inhabited by Veddahs, the soil of which contained in great abundance stone implements of a very rough kind. Further investi-

¹ "Astronomische Beobachtungen an der k.k. Sternwarte zu Prag, in den Jahren 1900-1904." Auf öffentliche Kosten herausgegeben von Prof. Dr. L. Weinek. (Prag: K.U.K. Hofbuchdruckerei A. Haase, 1907.)

gations of some other caves, one near Kattragam, the other near Kalodai, led to an identical result. They also succeeded in discovering upon the hilltops of the country of Upper Uva the same rough stone implements in great quantities and still well preserved. Not only the autochthony of the Veddahs can be regarded as a proved fact, but also their former distribution over probably the whole island, including the low country as well as the mountainous districts.

The shape of the chips, knives, lance points, scrapers, and fragments of bone awls enables this stone-industry to be described as analogous to that of the Madelaine period of the Palæolithic age. "Yet," as the cousins Sarasin remark, "this industry is to be denoted as a special *Facies Veddaica*, inasmuch as white quartz (mainly of an ice-like transparency) furnished the principal part of the material." Besides this, they also found a red, yellow, and black variety of quartz (jasper) employed in great profusion, which contrasted strangely with the monotonous grey gneiss of the caves themselves. On the whole, these implements are of small size, suited to small hands, and therefore employed by a small race of men. The stone hammers which were used to strike chips off the cores are of a remarkably small size. The Sarasins conclude their article with these words:—"We, furthermore, may already venture to say that the second main-period of the Stone age, the Neolithic one—viz. that characterised by the polished stone axe—is entirely wanting in the island of Ceylon, the Veddahs having made the step directly from the Older Stone Age into the Modern Age of Iron, which was brought them by the Sinhalese, or perhaps by another people of the Indian continent."

It is believed by some in Ceylon that there are only some hundred Veddahs existing, and Dr. Sarasin informed a *Ceylon Observer* representative that there are but a small number of Veddahs of pure blood to be found, perhaps only about fifty or sixty. These chiefly occur in Nilgala, Bibile, and the Putipola hill in Moli-gala, where there are only three small communities of the purest blood. Most of them build small, primitive huts, while some live in the open, sometimes in caves, but not always; those who have families build huts. Their own language is lost; being a small tribe surrounded by thousands of Sinhalese they have learnt a simple dialect of Sinhalese. They have no knowledge of their history. There is no chief, but the oldest man is called the speaker; he has, however, no privileges, and is not empowered to issue orders. They no longer know how to make stone implements, and now buy iron from the Sinhalese. Dried flesh and forest fruit are eaten. They have no religious ceremonies, but some believe in ghosts, whom they call *yakas*, though others disbelieve in their existence. Idolatry is not practised, nor do they worship stones or trees, or pray to them; indeed, the majority deny that they know anything about them. The Veddahs are strictly moral, there are no thieves among them, they never take alcohol, and they never tell lies.

A. C. H.

AN ITALIAN MONUMENT TO LINNÆUS AT THE END OF THE EIGHTEENTH CENTURY.

IN these days, when all the world of science unites in celebrating the memory and glory of the great Swedish naturalist, it is interesting to recall from the utter oblivion in which it has remained until now the monument and inscription dedicated to Linné in Naples at the end of the eighteenth century, presumably in 1778, the year of Linné's death.

The monument, which probably consisted only of the marble inscription, was not a public monument,