

Mr. Barbour Lathrop, of Chicago, for the exploration of that country.

IN honour of the 150th anniversary of the birth of Goethe (August 28, 1899), Dr. H. Potonié reprints, from his *Naturwissenschaftliche Wochenschrift*, a treatise on the morphological origin of the leaves of plants. The importance is shown of the part played by Goethe's theory of metamorphosis in the elucidation of problems connected with vegetable morphology, and it is pointed out that the introduction of the term "morphology" itself is due to Goethe.

VOLUME XV., part 7 of the *Nouveaux mémoires de la Soc. Imp. des Naturalistes de Moscou* is chiefly occupied by a monograph of the genus *Sphæronema* (Ascomycetes) by M. A. Jaczewski. He enumerates and describes seventy-two good specimens of the genus, seventy-seven being rejected as not properly belonging to it, besides eight others, for which a new genus, *Pseudographium*, is formed. D. Strémonkhoff has also a short paper on the ammonites *Phylloceras zignodianum* and *Lytoceras adelaë*, from the schists of Balacilava.

PROF. VERNON L. KELLOGG gives an interesting account, in the *American Naturalist* for August, of the Hopkins Sea-side Laboratory on the Bay of Monterey, connected with the Leland Stanford Junior University. Monterey Bay and the Bay of Naples are stated to be much alike in the abundance and representation of species. The Bay is a middle point between the north and south zones of the Pacific coast. The regular sessions of the laboratory are held in June and July of each year; but investigators and students working without instruction may continue their work though the summer. Courses of lectures are given in general zoology, embryology and cryptogamic botany.

PRACTICAL directions for stuffing and setting up birds are given in "Bird Stuffing and Mounting," the fifth edition of which has been published by Messrs. J. and W. Davis, Dartford. To students of natural history and collectors this practical manual of taxidermy should be of service.

IN connection with the Parents' National Education Union, a course of lectures to young people will be delivered by Mr. Cecil Carus-Wilson at the Horbury Rooms, Notting Hill Gate, during this month and next. The titles of the lectures are "The Wonders of Rain," "Ice and Glaciers," "The Mighty Ocean," "Volcanoes and Geysers." The aim will be to interest and entertain children by directing their attention to the natural phenomena which surround them, and upon which the studies of geography, geology and physiography are based.

THE additions to the Zoological Society's Gardens during the past week include a Macaque Monkey (*Macacus cynomolgus*, ♂) from India, presented by Dr. Montgomery Smith; an African Civet Cat (*Niverra civetta*) from West Africa, presented by Mr. W. H. Hardwick, R.N.; a Two-spotted Paradoxure (*Nandinia binotata*) from West Africa, presented by Mr. F. Gordon; a Black-backed Kaleege (*Euplocamus melanonotus*, ♀), two Sonnerat's Jungle Fowls (*Gallus sonnerati*, ♀ ♀), a Wood Francolin (*Francolinus gularis*) from India, presented by Mr. W. F. Pedler; four Green Lizards (*Lacerta viridis*), European, presented by Mr. F. K. Preston; two Black-eared Marmosets (*Hapale penicillata*) from South-east Brazil, a Hocheur Monkey (*Cercopithecus nicticans*), a Ruppell's Parrot (*Paeocephalus ruppelli*) from West Africa, a Maroon Oriole (*Oriolus trailii*) from India, two Radiated Tortoises (*Testudo radiata*) from Madagascar, deposited.

NO. 1561, VOL. 60]

### OUR ASTRONOMICAL COLUMN.

NEW ALGOL VARIABLE IN CYGNUS.—The following *minima* occur at observation times for observation during October :—

D.M. + 45° 30'62.		{	R.A. 20h. 2'4m.	(1855)
			Decl. + 45° 53'	
			d. h. m.	d. h. m.
1899.	Oct. 5 8 43		1899.	Oct. 23 15 43
,,	,, 14 12 13		,,	,, 28 5 28

STELLAR PARALLAX.—M. Osten Bergstrand, of the Upsala Observatory, has recently been engaged in measuring photographic chart plates to determine any possible evidence of stellar parallax (*Astr. Nach.*, Bd. 150, No. 3593). The photographs were taken with the photographic refractor of 33 cm. aperture and 4'33 metres focal length during 1897 and 1898, all the measures being made with a Repsold micrometer in conjunction with a "reseau" by Gautier. After describing the method of measurement adopted, the following values for parallax are given :—

Star.	Parallax.	
Σ 1516 A.	... + 0''·080 ± 0''·011.	... From measures of <i>four</i> comparison stars on <i>fourteen</i> plates.
A Oe. 11677...	... + 0''·192 ± 0''·013.	... From measures of <i>eight</i> comparison stars on <i>nine</i> plates.

The latter star is remarkable as having a very large proper motion—about 3" annually.

PRECESSION TABLES.—We have received a volume compiled by Dr. Downing, superintendent of the English Nautical Almanac, containing a series of tables which have been constructed so as to give the values of the precessions corresponding to Newcomb's value of the Precessional Constant, as deduced by him in accordance with the request made to him at the International Conference on Fundamental Stars, held in Paris in May 1896. Prof. Newcomb's original results are published in the *Astronomical Papers of the American Ephemeris*, vol. viii. part i. The present tables are constructed for Epoch 1910'0, but the method of setting out is such that they can be used with facility for at least ten years before and after that date.

LONGITUDE FROM MOON CULMINATIONS.—In a communication to the Royal Astronomical Society (*Monthly Notices*, R. A. S., vol. lix. p. 513, May 1899), Mr. D. A. Pio, of Syra, Greece, brings forward a new method of determining local longitude. The determination of culmination is only undertaken to give the precise instant of the moon's transit across the local meridian, thereby obviating the necessity of an accurately adjusted transit instrument with the many precautions connected with it. The instruments required are a sextant, artificial horizon, and a well-rated chronometer, together with the usual tables. Instead of finding the right ascension of the moon directly as usual, the author obtains it indirectly by finding the mean local time of meridian passage, converting to sidereal time, and then adding the right ascension of the mean sun at local transit. The difficulty of finding the mean local time of transit is got over by observations of equal altitudes, the resulting *time of culmination* requiring to be corrected to reduce it to *time of transit*. Local mean time is determined by similar measures of equal altitudes of the sun. The difference between the times of transit of sun and moon thus obtained is, of course, the mean local time of the moon's transit. The remaining calculations are precisely similar to the usual method of lunar distances, so that the novelty of the new method consists in the substitution of the use of "equal altitudes" with a sextant for meridian passage with a transit circle; in fact the observation is really a chronometric one. The difference in time between the transits of sun and moon should be correct to the *tenth* of a second, and to facilitate this the two observations should be chosen as near together as possible. The method is stated to be unsuitable for high latitudes. The necessary formulæ for "reduction to meridian" are included in the article, and an example fully worked out to illustrate the exact method of procedure.