despatch them to China. The harvest is during the months of March and April. As soon as the nests are built, and before the swallows begin to lay their eggs, they are collected; the birds then build second nests, and these are likewise taken away; the third nests are left undisturbed for the birds to lay and hatch. The island visited by the Danish writer was about 500 feet high, and 3000 feet in diameter. The caves are only accessible by means of rattan ladders, and the nests are collected from the roofs by means of rattan galleries and stagings. To show the impossibility of ingress and egress without artificial assistance, it is stated that about forty years ago, before the collection and sale of the nests was made a Government monopoly, about fifty Malays arrived at the caves before the Siamese, and commenced taking the nests; while they were engaged in this the Siamese arrived, and in revenge ran away with the rattan ladders, leaving the whole of the Malays to die of hunger and thirst in the caves, from which their only means of escape had been taken. Their skeletons are still in the caves. These Siamese caves appear smaller, not so well ordered, and infinitely wilder and more dangerous than those at Gomanton, but otherwise there appears little difference in the nests themselves, or in the mode of collecting them.

THE latest numbers of the Ceylon *Orientalist* (Nos. 3 and 4, vol. ii.) are largely occupied with folk-lore. The editor writes on comparative folk-lore, showing how certain Singalese stories occur elsewhere in Sanskrit and Siamese collections. Mr. Lewis's "Notes on some Oriental Folk-lore Stories" is on much the same lines, the field examined being somewhat more extensive. Thus a story from a Singalese collection of stories, the "Jataka," is found in English in Chaucer's "Pardoner's Tale." There are two other papers of a like character. The Rev. H. Horsley writes on Tamil proverbs, while Mr. Lewis concludes some interesting papers on a subject which appears to have escaped investigation hitherto—viz. the terms of relationship in Singalese and Tamil.

PROF. LODGE wishes to state that in his letter under the heading of "Permanent Magnetic Polarity," in our last issue, in the last paragraph the word "*explained*" should be "*unexplained.*"

THE additions to the Zoological Society's Gardens during the past week include a Ring-tailed Lemur (*Lemur catta*) from Madagascar, presented by Mr. Alfred Best; a Bonnet Monkey (*Macacus sinicus*) from India, presented by Dr. E. Woakes; a Mountain Ka-Ka (*Nestor notabilis*) from New Zealand, presented by Mr. James Ellis; four Leopard Tortoises (*Testudo pardalis*), eleven Angulated Tortoises (*Chersina angulata*), an Areolated Tortoise (*Homopus areolata*), three Geometric Tortoises (*Testudo geometrica*), a Robben Island Snake (*Coronella phocarum*), two Infernal Snakes (*Boodon infernalis*) from South Africa, presented by the Rev. G. H. R. Fisk, C.M.Z.S.; two Common Boas (*Boa constrictor*) from South America, a West African Python (*Python sebæ*) from West Africa, presented by Mr. Daniel Nicols; two Golden Plovers (*Charadrius pluvialis*), European, a Sharp-nosed Crocodile (*Crocodilus acutus*) from Central America, deposited; three Wheatears (*Saxicola œnanthe*), British, purchased; a White-fronted Lemur (*Lemur albifrons*), born in the Gardens.

OUR ASTRONOMICAL COLUMN

THE BINARY STAR β DELPHINI.—In 1873 Burnham discovered that the primary star of the well-known wide double-star β Delphini was itself a very close double, and a few years' observations sufficed to show that it was a binary star in rapid motion. As the companion star has now described over 180° of its apparent path, a fairly accurate approximation to the elements of its orbit is possible. An attempt has accordingly been made, first by Dubiago and more recently by Gore, to

determine the orbit, with tolerably accordant results. The former makes the period to be 26·07 years, with perihelion passage at 1882·19 and semi-axis major 0″·55. Gore finds the period to be 30·91 years, and fixes the periastron passage at 1882·25, with semi-axis major = 0″·517. The observations are fairly well represented by these elements, considering what a close and difficult object the star is to measure. According to Gore's elements the components were at their minimum distance, 0″·192, at the epoch 1879·91; and during 1879 Burnham failed to elongate the star with the 18½-inch Dearborn refractor. We hope that those double-star observers who possess sufficiently powerful telescopes will not lose sight of this interesting object.

THE VELOCITY OF LIGHT AND THE SOLAR PARALLAX.— From two determinations of the velocity of light made by Prof. Michelson (in 1879 and in 1882), and from one made by himself in 1882, Prof. Newcomb concludes that the most probable value of this physical constant, expressed in kilometres per second, is 299860 ± 30. Adopting Nyrén's value of the constant of aberration from Pulkowa observations, viz. 20″·492, the corresponding value of the solar parallax is 8″·794, taking the earth's equatorial radius to be 6378·2 kilometres, as determined by Clark. We may also draw attention to the circumstance that Prof. Newcomb considers that his observations negative the hypothesis put forward by Messrs. Forbes and Young as to the existence of a difference between the velocities of rays of different colours. Had there been such a difference to anything like the extent asserted by these physicists, it would have shown a well-marked effect in Prof. Newcomb's apparatus. No trace, however, of any such effect could be seen. Prof. Michelson has arrived at similar conclusions as to the erroneous nature of the views expressed by the Scotch experimenters.

FABRY'S COMET.—The following ephemeris by Dr. H. Oppenheim (*Astr. Nach.* No. 2712) is in continuation of that given in NATURE for 1886 March 18:—

For Berlin Midnight

1886	R.A. h. m. s.	Decl. ° ′	Log *r*	Log Δ	Brightness
April 16	23 58 48	38 46·9 N.	9·8317	9·6825	118
18	0 13 47	37 53·4	9·8417	9·6282	145
20	0 33 27	36 24·0	9·8527	9·5686	181
22	0 58 58	33 58·3	9·8645	9·5043	230
24	1 31 39	30 2·6	9·8770	9·4370	297
26	2 12 8	23 52·1	9·8899	9·3726	376
28	2 59 25	14 52·2	9·9031	9·3229	445
30	3 50 0	3 37·0 N.	9·9165	9·3042	456

The brightness on December 2 is taken as unity.

BARNARD'S COMET.—The following ephemeris by Dr. H. Oppenheim (*Astr. Nach.* No. 2714) is from elements by Dr. A. Krueger:—

For Berlin Midnight

1886	R.A. h. m. s.	Decl. ° ′	Log *r*	Log Δ	Brightness
March 31	1 50 22	30 45·4 N.	9·9509	0·2006	11
April 4	1 49 33	32 15·9		0·1868	
8	1 48 25	33 49·1	9·8776	0·1699	18
12	1 46 58	35 23·8		0·1494	
16	1 45 6	36 57·3	9·7962	0·1245	32
20	1 42 50	38 25·0		0·0941	
24	1 40 23	39 38·9	9·7188	0·0568	62
28	1 38 22	40 26·0		0·0111	
May 2	1 38 8	40 28·4 N.	9·6796	9·9556	118

The brightness on December 5 is taken as unity.

THE NEBULA ROUND MAIA.—MM. Perrotin and Thollon (*Comptes rendus*, cii., No. 10) have succeeded in seeing the Maia nebula "without too much difficulty"; but M. Perrotin adds, "We have seen the nebula because we knew it existed. We should certainly not have observed it else." The nebula seemed comprised in an angle of about 120°, with the opening turned towards the north-west, and the summit to Maia; one of the sides lies along the line joining Maia to Bessel's star An. 4. The general appearance is that of a faintly luminous cloud, of which the different parts are very unequally bright. A nebulous filament stretching from Maia nearly to the little star just named, and a region towards the north-east and nearly 2′ from Maia, are the brightest parts of the nebula. On one occasion exceedingly faint luminous points were suspected in the centre of this latter district.