

THE Committee of the Liverpool Naturalists' Field Club begin their report for the past year by observing that for twenty-five years past statistics have been exhausted and lectures also, so far as their usefulness is concerned. "Your Committee, therefore, on this occasion, will spare you figures and forbear admonition, contenting themselves with a bare record of the year's proceedings, and leaving members to draw their own conclusions as to what has been and what might have been done." With such a lugubrious commencement, one might expect that the affairs of the Club were in a "parlous" state, but this is far from being the case. One complaint is that the attendance at the excursions was not satisfactory, and therefore either the number will have to be cut down, or the distances travelled be less. The average attendance was about 60,—which many similar societies would consider an uncommonly good one, especially when it is remembered that some of the journeys were rather long. The Treasurer has the handsome balance of nearly 90*l.* in his hands; the President, the Rev. H. Higgins, delivered an excellent address on "Calcareous Sea-Weeds: an Essay in Comparative Phytology;" the lists of interesting plants noticed on some of the excursions show that the members who did go kept their eyes open; the competition for the prizes appears to have been pretty keen; and there is a tolerably long list of members,—so that, on the whole, notwithstanding the low spirits of the Committee, the case of the Society is far from hopeless. But we trust the members will attend in larger numbers when the Society next goes to the Cefn Caves, Caergwrle, or Humphry Head, notwithstanding the long distances. They will thereby not only add to their own enjoyment and instruction, but will bring relief to the minds of their depressed and anxious Committee.

THE greatest balloon in the world has been lately constructed at San Francisco by a Mr. van Tassel. It will hold 150,000 cubic feet of gas, and has been made for the purpose of traversing the American Continent from ocean to ocean. From the bottom of the car to the top of the inflated balloon will be 119 feet, and when filled the diameter will be 68 feet. The car is 21 feet in circumference and has sides 34 inches high; 15 persons can be seated in it.

FOR several years attempts have been made in Sweden to extract tannic matter from the Swedish species of pine, similar in quality, &c., to that of the American hemlock (*Pinus canadensis*), but without satisfactory results, chiefly on account of the manner in which this is done not being known. Now, however, the question has been solved by a chemist, Dr. Laudin, who, having visited North America for this purpose, has, on his return to Sweden, succeeded in producing tannic matter by a chemical process, which has been found equal to the American, though the colour of the Swedish leather produced therewith is more yellow in colour than the American. It is hoped that this discovery will have the effect of causing a great tanning industry to spring up in Sweden.

THE additions to the Zoological Society's Gardens during the past week include a Guinea Baboon (*Cynocephalus sphinx*), from West Africa, presented by Mr. C. Palgrave, F.Z.S.; an Alpine Marmot (*Arctomys marmotta*), two Tawny Owls (*Syrnium aluco*), European, presented by Mr. Lionel H. Hanbury, F.Z.S.; a Bank Vole (*Arvicola pratensis*), British, presented by Mr. G. T. Rope; two Derbian Screamers (*Chauna derbiana*) from the North Coast of Columbia, presented by Capt. H. Rigaud; a Peregrine Falcon (*Falco peregrinus*), European, presented by Mr. J. Howard; a Golden-crowned Conure (*Conurus aureus*) from South-East Brazil, deposited; three Long-fronted Gerbilles (*Gerbillus longifrons*), eight Elliot's Pheasants (*Phasianus ellioti*), bred in the Gardens.

ASTRONOMICAL PHENOMENA FOR THE WEEK 1886 AUGUST 22-28

(FOR the reckoning of time the civil day, commencing at Greenwich mean midnight, counting the hours on to 24, is here employed.)

At Greenwich on August 22

Sun rises, 4h. 58m.; souths, 12h. 2m. 42'2s.; sets, 19h. 7m.; decl. on meridian, 11° 44' N.; Sidereal Time at Sunset, 17h. 11m.

Moon (at Last Quarter) rises, 22h. 6m.*; souths, 5h. 21m.; sets, 12h. 46m.; decl. on meridian, 13° 18' N.

Planet	Rises		Souths		Sets		Decl. on meridian
	h.	m.	h.	m.	h.	m.	
Mercury	4	13	11	19	18	25	12° 1' N.
Venus	2	28	10	19	18	10	19° 43' N.
Mars	10	47	15	49	20	51	12° 3' S.
Jupiter	8	25	14	22	20	19	17° 27' S.
Saturn	1	11	9	16	17	21	21° 53' N.

* Indicates that the rising is that of the preceding evening.

Occlusions of Stars by the Moon (visible at Greenwich)

Aug.	Star	Mag.	Disap.		Reap.	Corresponding angles from vertex to right for inverted image	
			h.	m.			
23	48 Tauri	6	1	23	1	54	126° 186°
23	γ Tauri	4	3	22	4	13	118 215
23	58 Tauri	6	4	1	near approach	348	—
Aug.	h.						
22	12		Jupiter at greatest distance from the Sun.				
25	11		Mercury stationary.				
27	20		Venus in conjunction with and 3° 0' north of the Moon.				

Variable Stars

Star	R.A.		Decl.	Aug.	h.	m.
	h.	m.				
U Cephei	0	52'2	81° 16' N.	22	21	8 m
Algol	3	0'8	40° 31' N.	22	20	47 m
V Tauri	4	45'4	17° 21' N.	27	21	7 m
W Virginis	13	20'2	2° 47' S.	27	0	0 m
U Coronæ	15	13'6	32° 4' N.	22	0	4 m
U Herculis	16	20'8	19° 9' N.	24	21	46 m
R Draconis	16	32'4	67° 3' N.	26		M
U Ophiuchi	17	10'8	1° 20' N.	22, 23	50	m
				and at intervals of 20 8		
β Lyrae	18	45'9	33° 14' N.	24	2	0 M
R Lyrae	18	51'9	43° 48' N.	28		M
δ Cephei	22	24'9	57° 50' N.	27	2	0 M

M signifies maximum; m minimum.

Meteor Showers

Meteors have been observed at this time of the year from near α Ceti, R.A. 53°, Decl. 0°; near Castor, R.A. 110°, Decl. 32° N.; near ζ Draconis, R.A. 260°, Decl. 64° N.; and from near ο Draconis, R.A. 282°, Decl. 57° N.

GEOGRAPHICAL NOTES

WE have before us Nos. 5, 6, 7, and 8 of *Petermann's Mittheilungen* for the present year, and Supplement No. 82. The last is a detailed account, by the late Herr Robert Schlagintweit, of the Pacific railways of North America. No. 5 contains a paper on the Xingu Expedition (concluded in No. 6), by Herr Claus, detailing the cartographical surveys and the physical and astronomical measurements made in the course of the explorations. The paper may be regarded as a supplement to the work of Dr. von den Steinen, "Durch Zentralbrasilien," lately published by Brockhaus. Dr. Oppel, in the same number, contributes a statistical paper showing the steady and enormous increase in the population of Europe. No. 7 contains two very interesting and original geographical papers—one by Herr Engelhard on the Island of Saleijer, a Dutch settlement in the Malay Archipelago, situated immediately south of Celebes. The island is described in an exhaustive way, its climate, people, situation, &c., being discussed in some detail. In the second