

temperature of the clouds is not greater than that of the surface; and when the temperature of the cloud-screen is lower than that of the surface, the temperature of the latter will fall. It is scarcely necessary to remark that in discussing the influence of cloud on the diurnal periodicity of the wind's velocity, only such means are of real value as are calculated from a very large number of observations.

During the night, when terrestrial radiation is proceeding, the temperature of the surface falls greatly, and instead of an ascensional movement in the lowermost stratum of the air, there is, on the contrary, a tendency towards, and, if the wind be light, an actual descensional movement down the slopes of the land. The effects of friction being thus intensified, the velocity of the wind falls to the daily minimum during these hours.

ALEXANDER BUCHAN

EPHEMERIS OF THE GREAT COMET, b 1882  
(Communicated by Vice-Admiral Rowan, Superintendent U.S. Naval Observatory)<sup>1</sup>

		R.A.		Decl.		Log. $r$ .		Log. $\Delta$ .	
		h.	m.	°	'	°	'	°	'
Feb.	10 <sup>o</sup> ,	6	0	37	8	...	19	41	17
	14 <sup>o</sup> ,	5	57	40	4	...	18	40	13
	18 <sup>o</sup> ,	5	55	19	7	...	17	41	17
	22 <sup>o</sup> ,	5	53	32	7	...	16	44	35
	26 <sup>o</sup> ,	5	52	14	7	...	15	50	14
March	2 <sup>o</sup> ,	5	51	24	4	...	14	58	16
	6 <sup>o</sup> ,	5	50	58	7	...	14	8	43
	10 <sup>o</sup> ,	5	50	54	8	...	13	21	37
	14 <sup>o</sup> ,	5	51	12	3	...	12	37	0
	18 <sup>o</sup> ,	5	51	47	9	...	11	54	52
	22 <sup>o</sup> ,	5	52	39	5	...	11	15	10
	26 <sup>o</sup> ,	5	53	46	1	...	10	37	56
	30 <sup>o</sup> ,	5	55	6	1	...	10	3	6
April	3 <sup>o</sup> ,	5	56	38	1	...	9	30	34
	7 <sup>o</sup> ,	5	58	20	9	...	9	0	19
	11 <sup>o</sup> ,	6	0	13	9	...	8	32	21

Note.—In the published elements  $\phi$  should be  $89^{\circ} 13' 42'' \cdot 70$  instead of  $89^{\circ} 7' 42'' \cdot 70$ .

Washington, February 10

E. FRISBY,  
Prof. Math., U.S.N.

ILLUSTRATIONS OF NEW OR RARE ANIMALS  
IN THE ZOOLOGICAL SOCIETY'S LIVING  
COLLECTION<sup>2</sup>

XI.

29. THE CAPE SEA-LION (*Otaria pusilla*).—It is a singular and as yet unexplained fact in geographical distribution, that while the Sea-lions amongst Mammals and the Albatrosses amongst Birds are confined to the South Atlantic Ocean, both these groups reach up to high northern latitudes in the Pacific. In the Atlantic, no Albatross is seen "north of the line," whereas these birds are familiar objects on the coasts of both California and Japan. No Sea-lion is met with in the Atlantic until we get to the Cape on one side and the La Plata on the other, but these animals are well-known objects at San Francisco, and the great supply of their much-valued furs comes from the far northern territory of Alaska.

The Sea-lion first became an inhabitant of our Zoological Gardens, and thus known to Europe in a living state, in 1866, when a French seaman, François Lecomte, brought to this country an example of the Patagonian species (*Otaria jubata*), and exhibited it to the public. The remarkable form of this animal, its extreme docility, and its agile movements attracted great attention, and

<sup>1</sup> Computed from elements (NATURE, vol. xxvii. p. 225) and reduced to the mean equinox 1883<sup>o</sup>.

<sup>2</sup> Continued from p. 154.

led to its acquisition by the Zoological Society, in whose Gardens it quickly became an established favourite. Upon the death of this individual in the autumn of the same year, the Council of the Society determined to send out Lecomte, who had entered their service in charge of it, to the Falkland Islands, in order to obtain other specimens. Lecomte returned to this country in August, 1867, but owing to various unforeseen circumstances only succeeded in landing alive one of the four Sea-lions with which he had started from Port Stanley. This animal, young and small on its arrival, threw well under Lecomte's careful management, and soon supplied the void occasioned by the death of the original specimen. Like its predecessor, it exhibits extraordinary agility in the water, and catches the fishes thrown to it for food both above and below the surface with unerring aim.

Four years subsequently, in 1871, the Society received from Sir Henry Barkly, then Governor of the Cape Colony, a present of a young specimen of the Cape Sea-lion, of which we now give an illustration (Fig. 29). Like its Patagonian relative, the Cape Sea-lion is a female, and although quite adult, does not attain the dimensions of the male sex of these animals. In general appearance, shape, and form, the two species are very similar, and present little obvious differences to the casual observer, except that the ear-lobe is longer in the Cape animal. To the two females has recently been added a young male of the Patagonian form, and the three individuals now live together in the narrow limits of their basin in the greatest harmony, forming one of the most attractive groups in the Regent's Park Gardens. Little has been recorded of the mode of life of the Sea-lion in a state of nature, but Mr. E. L. Layard in his "Catalogue of the South African Museum," tells us that it "is abundant along the whole of the coasts of the colony, and has given its name to numerous bays, islands, and capes, of which 'Robben' Islands near Cape Town is perhaps the best known.

"It resorts to these places in great numbers for breeding purposes, and is sought for and slain for the sake of its fur and oil. The male is said to be maned, and to much exceed the female in size, but though double the market value of the skin has been offered by the Museum for a skin of the male of this common animal, as it is not the custom of the sealers to take the skin off, leaving in the head and feet, we have been unable to procure one."

As regards the habits of some of the other members of this genus, which are of the most extraordinary character, we have now ample details concerning the North Pacific species in a very interesting and well illustrated work prepared by Mr. Henry W. Elliott on the Seal Islands of Alaska and their productions.<sup>1</sup>

Soon after the Sea-lions were established in the Zoological Gardens in this country, specimens of these animals were obtained by the principal Gardens on the Continent, and basins built for the exhibition of their aquatic evolutions. But the examples on the Continent, as well as those in the Aquarium at Brighton, all belong to one of the North Pacific species of Sea-lion (*Otaria californiana*), which is found in enormous multitudes upon the Pacific coast. Of the South African species now figured, the example in our Zoological Society's Gardens is the only one yet brought alive to Europe.

30. BLANFORD'S SHEEP (*Ovis blanfordi*).—Every high mountain-tract in Northern and Central Asia appears to be occupied by a distinct form of Wild Sheep (*Ovis*), while single outliers of the same genus are found far to the west in Sardinia and to the east in North America. Some of these animals, such as the celebrated "Ammon" of Ladakh (*Ovis hodgsoni*) and the Snow-sheep of Kamschatka (*O. nivicola*), attain a magnificent size and

<sup>1</sup> A Monograph of the Seal Islands of Alaska. By Henry W. Elliott. Reprinted, with additions, from the Report of the Fishery Industries of the Tenth Census. 4to. Washington, 1882.