

position—suspended as they were with the front edge downward—is the most favourable one possible for the retention of water within the gill-cavity, for in this position the edges of the mantle would closely pack against the inner edges of the shell, effectually closing any small leaks, and the retained water would also be in the most favourable position to moisten the gills, even after part had evaporated. It is also possible that when in this position the oyster instinctively keeps the shell tightly closed, to prevent the loss of water. This incident, says Prof. Verrill, may give hint of the best mode of transporting oysters and clams long distances. Perfect shells should be selected, and they should be packed with the front edge downward, and kept moderately cool, in a crate or some such receptacle which will allow a free circulation of air. Under such favourable conditions selected oysters can doubtless be kept from eight to twelve weeks out of water. Mr. Ryder, of Washington, adds that he has had oysters live in the shell for two weeks, where the temperature ranged from 30° to over 80° F., lying on shelves in the cases in his work-room, exposed the whole time to the air, without showing the slightest tendency to decompose.

THE schooner *Rosario*, at New York, reports than on June 23, in lat. 29° 14' N. and long. 133° 25' W., at 11 a.m., two heavy shocks of submarine earthquake were experienced. These were about one minute apart, and the last was much heavier than the first, causing the vessel to tremble violently. The sky was overcast, and the sea remarkably smooth.

THE Russian Geographical Society is said by the St. Petersburg journals to contemplate sending a scientific expedition to the Amour for the purpose of studying the surrounding region with regard to its geographical, historical, and commercial features, as well as its mineral resources.

IT is announced in Brussels that the German Lieutenant Weissmann, who is in the service of the African Association, has discovered that the River Kassai, which was always believed to join the Congo above the equator station, forms a curve and falls into Lake Leopold II.

ON the night of August 31 to September 1 temperature fell to a lower point in several districts than is known to have ever before happened so early in the season. Over upper and middle Strathspey in particular the frost was very severe. At Kingussie the protected thermometer fell to 24°·9 and the exposed to 18°·0, while at Grantown the exposed thermometer fell to 15°·0, these being all compared instruments and in good order. At Kingussie ice an inch thick was found on the water supplying the hygrometer. In this large district the potato crop is completely destroyed, not only in low-lying situations but also on the high-lying slopes. On the other hand, on crossing from Inverness-shire into Perthshire, the potato crop is safe, the tops being only slightly blackened. At the Ben Nevis Observatory on the same night, with a sky equally clear and cloudless as was over Strathspey, the protected thermometer fell only to 32°·9 and the exposed thermometer to 24°·6, being respectively 8°·0 and 6°·6 higher than occurred at Kingussie on the same night.

THE additions to the Zoological Society's Gardens during the past week include a Barbary Ape (*Macacus inuus*) from North Africa, presented by Miss Bedford; at Bank Vole (*Arvicola pratensis*) from Essex, presented by Mr. E. Rosling; a Common Hedgehog (*Erinaceus europæus*), British, presented by Master C. Hanrott; a Common Polecat (*Mustela putorius*), British, presented by Mr. W. Buckley; an Undulated Grass Parrakeet (*Melopsittacus undulatus*) from Australia, presented by Mdlle. de Nujac; a Smooth Snake (*Coronella levis*) from Dorsetshire, presented by the Rev. O. P. Cambridge, C.M.Z.S.; two Douglass's Horned Lizards (*Phrynosoma douglassi*) from New Mexico, presented by Dr. R. W. Shufeldt; two Common Chameleons (*Chamaleon vulgaris*) from North Africa, presented by Mr. F. Bland.

ASTRONOMICAL PHENOMENA FOR THE WEEK, 1885, SEPTEMBER 20-26

(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 September 20

Sun rises, 5h. 44m.; souths, 11h. 53m. 16'2s.; sets, 18h. 2m.; decl. on meridian, 0° 56' N.: Sidereal Time at Sunset, 18h. 1m.

Moon (Full on Sept. 24) rises, 16h. 21m.; souths, 21h. 21m.; sets, 2h. 27m.*; decl. on meridian, 12° 12' S.

| Planet | Rises | | Souths | | Sets | | Decl. on meridian |
|---------|-------|-----|--------|----|------|----|-------------------|
| | h. | m. | h. | m. | h. | m. | |
| Mercury | 4 | 1 | 10 | 50 | 17 | 39 | 8° 51' N. |
| Venus | 9 | 12 | 14 | 7 | 19 | 2 | 13° 11' S. |
| Mars | 0 | 23 | 8 | 21 | 16 | 19 | 20° 42' N. |
| Jupiter | 4 | 52 | 11 | 23 | 17 | 54 | 5° 21' N. |
| Saturn | 22 | 27* | 6 | 35 | 14 | 44 | 22° 20' N. |

* Indicates that the rising is that of the preceding and the setting that of the following day.

Occultations of Stars by the Moon

| Sept. | Star | Mag. | Disap. | | Reap. | | Corresponding angles from vertex to right for inverted image |
|-------|-------------|------|--------|----|-------|----|--|
| | | | h. | m. | h. | m. | |
| 20 | 18 Aquarii | 6 | 18 | 47 | 19 | 55 | 49 305° |
| 21 | B.A.C. 7774 | 6 | 22 | 8 | 23 | 22 | 136 283 |
| 24 | B.A.C. 8365 | 6½ | 5 | 12 | 6 | 5 | 124 350 |
| 25 | α Piscium | 5 | 20 | 12 | 21 | 9 | 94 233 |
| 26 | B.A.C. 741 | 6½ | 21 | 19 | 22 | 3 | 26 299 |

The Occultations of Stars are such as are visible at Greenwich.

| Sept. | h. | |
|-------|----|---|
| 20 | 8 | Mercury at least distance from the Sun. |
| 22 | - | Sun in equator. |
| 24 | - | Partial eclipse of the Moon, but the Moon will set at Greenwich at about sunrise whilst partly obscured by the penumbra and before entering the shadow. |

SCIENTIFIC SERIALS

The Proceedings of the Royal Society of Queensland, 1884, vol. i. parts 2, 3, 4.—We are glad to see that this new Society in one of our leading colonies is advancing rapidly. In the parts before us Mr. Tryon describes certain rock-drawings of the aborigines of Queensland, of a class hitherto undescribed (with plates). Mr. C. W. de Vis, who is one of the most indefatigable contributors, writes on new Australian lizards; on a new form of the genus Therapon; on new Queensland lizards; on a new species of Hoplocephalus; on an apparently new species of Halmaturus; on a new species of Hyla; a description of new snakes with a synopsis of the genus Hoplocephalus; on the fauna of the Gulf of Carpentaria, and a conspect of the genus Heteropus. Mr. Bailey gives instalments of his contributions to Queensland Flora. Mr. Broadbent writes on the migrations of birds at the Cape York peninsula, which is a peculiarly favourite spot for observing the migrations of birds from and to New Guinea, for the passage is shortest here. Ethnology is well represented in the numbers before us, for, besides the paper by Mr. Tryon mentioned above, we have one by Dr. Bancroft on the food of the aborigines of Central Australia, and one by Mr. Duffield on the inhabitants of New Ireland and its archipelago, their fine and industrial arts, customs, and language, especially their tattooing. Mr. Knight describes a new species of Parmelia, and Baron von Müller, the *Dendrobium cincinnatum*, sp. nov. Mr. Bernays describes exotic fruits new to Queensland. Mr. Pink pleads for the practice of hybridisation of plants; and Dr. Bancroft describes experiments with Indian wheats in Queensland. There are numerous other minor contributions.

SOCIETIES AND ACADEMIES

PARIS

Academy of Sciences, August 31.—M. Bouley, President, in the chair.—On the cyclonic character of the solar spots, in reply to M. Tacchini's objection, by M. Faye. In their normal state the spots, like terrestrial cyclones, are described as of circular form, with funnel-shaped penumbra, concentric circumferences,