

by Mr. H. A. Miers, entitled "Contributions to the Study of Pyrrargyrite and Proustite." The paper, as the author explains, is the result of a study of the rich collection of red silvers in the British Museum (Natural History). The analyses have been made by Mr. G. T. Prior, and the specific gravity determinations in most instances by both Mr. Prior and Mr. Miers himself. The number also includes a paper on a peculiar variety of hornblende from Mynydd Mawr, Carnarvonshire, and a note on picrite from the Liskeard district, both by Prof. Bonney; a paper on dufrenite from Cornwall, by Prof. Kinch; and notes on some minerals from the Lizard, by Mr. J. J. H. Teall.

THE following figures show the devastations caused in the Hungarian vineyards by the Phylloxera. In 1881, 50 vineyards were infected; this number rose in 1882 to 79, in 1883 to 107, in 1884 to 237, in 1885 to 388, in 1886 to 582, and in 1887 to 811. In 1887, 132,352 acres of land were infected, the area of all the Hungarian vineyards together being 740,000 acres.

A LIST of the minerals of New York County, by B. B. Chamberlain, appears in the Transactions of the New York Academy of Sciences, vol. vii. No. 7. This list has now been reprinted. The lists of Robinson and Cozzens numbered some thirty-five minerals. That of Mr. Bailey, in 1865, embraced about forty-five titles. Mr. Chamberlain, omitting some of the less important varieties, has placed on record about a hundred names. The majority of the specimens described are from his own collection.

IN an interesting paper on the decay of the building-stones of New York City, recently read before the New York Academy of Sciences, Mr. Alexis A. Julien says it is "pitiable" to see new buildings erected in soft and often, untried varieties of stone covered with delicate carvings of foliage and flower garlands, which are almost certain to be nipped off by the frost before the second generation of the owner shall enter the house. Mr. Julien points out that many of the best building-stones of America have never been brought into New York. Among the examples he mentions are siliceous limestones of the highest promise of durability, allied to that employed in Salisbury Cathedral; refractory sandstones, like some of those of Ohio and other Western States, particularly fitted for introduction into business buildings in the "dry-goods district," storage houses, &c., where a fire-proof stone is needed; and highly siliceous varieties of Lower Silurian sandstones, such as occur near Lake Champlain, quartzitic and hard to work, like the Craigleith stone of Edinburgh, and possessing the valuable qualities of that fine stone, in resisting discoloration, notwithstanding its light colour, and in remarkable resistance to disintegration.

THE French *Revue des Colonies* reports that from a plant called *Kanaff*, which grows in the summer on the shores of the Caspian, M. O. Blakenbourg, a chemist, has obtained an admirable textile matter, which is soft, elastic, tough, and silky, and which can be bleached chemically without losing these properties. The resistance of this new material is said to be far greater than that of hemp, while its specific weight is much less.

PROF. HEYDECK, of Königsberg, has been lecturing on a pile dwelling, in the Szontag Lake, in East Prussia. Ten years ago, the lake was lowered a little more than a metre. The land thus gained was cultivated, and a pile dwelling was discovered. Many flint implements were found. There was only one bronze ornament, but articles of bone were numerous. There were also vessels of clay, of which nineteen were quite uninjured.

IN our review of "The Orchids of the Cape Peninsula," by Harry Bolus, F.L.S., last week, it was noted that the omission of the publisher's name might cause inconvenience to persons wishing to purchase copies. Messrs. Wesley and Son write to us that some copies of the work have been sent to them for sale.

THE additions to the Zoological Society's Gardens during the past week include an African Zebu (*Bos indicus* ♀) from East Africa, presented by Mr. W. Mackinnon, F.Z.S.; a Coot (*Fulica atra*), British, presented by Mr. J. Cutting; a Greek Partridge (*Caccabis saxatilis*) from Bussorah, presented by Mr. Harold Hanaeur, F.Z.S.; two Red and Yellow Macaws (*Ara chloroptera*) from South America, a Greater Sulphur-crested Cockatoo (*Cacatua galerita*), a Roseate Cockatoo (*Cacatua roseicapilla*) from Australia, presented by Lady Meux; a — Guinea Fowl (*Numida* —) from East Africa, presented by Mr. Percy C. Reid; three Ruffs (*Machates pugnax*), two Snow Buntings (*Plectrophanes nivalis*), British, purchased; a Great Wallaroo (*Macropus robustus*), born in the Gardens.

ASTRONOMICAL PHENOMENA FOR THE WEEK 1889 JANUARY 13-19.

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

At Greenwich on January 13

Sun rises, 8h. 3m.; souths, 12h. 9m. 6.8s.; sets, 16h. 15m.; right asc. on meridian, 19h. 41.8m.; decl. 21° 24' S. Sidereal Time at Sunset, 23h. 48m.

Moon (Full on January 17, 6h.) rises, 13h. 35m.; souths, 21h. 31m.; sets, 5h. 36m.\*; right asc. on meridian, 5h. 5.2m.; decl. 19° 52' N.

Planet.	Rises.		Souths.		Sets.		Right asc. and declination on meridian.	
	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	
Mercury..	8 45	...	12 52	...	16 59	...	20 25.2	... 21° 22' S.
Venus ...	9 52	...	15 5	...	20 18	...	22 37.8	... 9 58 S.
Mars ...	9 43	...	14 49	...	19 55	...	22 21.7	... 11 16 S.
Jupiter ...	6 11	...	10 7	...	14 3	...	17 39.3	... 23 0 S.
Saturn ...	18 25*	...	1 55	...	9 25	...	9 26.1	... 16 16 N.
Uranus ...	0 27	...	5 50	...	11 13	...	13 22.0	... 7 57 S.
Neptune..	12 34	...	20 17	...	4 0*	...	3 51.5	... 18 26 N.

\* Indicates that the rising is that of the preceding evening and the setting that of the following morning.

Jan.

17 ... — ... Partial eclipse of the Moon: visible throughout the United Kingdom: first contact with shadow 3h. 59m.: middle of eclipse 5h. 30m.: last contact with shadow 7h. 0m. About two-thirds of the moon's diameter will be obscured.

18 ... 21 ... Saturn in conjunction with and 1° 20' south of the Moon.

Variable Stars.

Star.	R.A.		Decl.	Jan.	h. m.
	h. m.	h. m.			
U Cephei ...	0 52.5	...	81 17 N.	...	13, 21 33 m
Algol ...	3 1.0	...	40 32 N.	...	18, 21 12 m
λ Tauri ...	3 54.6	...	12 11 N.	...	19, 2 28 m
ζ Geminorum ...	6 57.5	...	20 44 N.	...	17, 3 34 m
R Canis Majoris ...	7 14.5	...	16 11 N.	...	14, 0 41 m
S Cancri ...	8 37.6	...	19 26 N.	...	15, 4 6 m
T Virginis ...	12 8.9	...	5 25 S.	...	13, 20 51 m
δ Libræ ...	14 55.1	...	8 5 S.	...	14, M
U Coronæ ...	15 13.7	...	32 3 N.	...	15, 6 44 m
R Scorpil ...	16 11.0	...	22 40 S.	...	18, 5 45 m
U Ophiuchi ...	17 10.9	...	1 20 N.	...	16, M
R Lyræ ...	18 52.0	...	43 48 N.	...	17, 5 45 m
S Vulpeculæ ...	19 43.8	...	27 1 N.	...	18, M
R Sagittæ ...	20 9.0	...	16 23 N.	...	13, M
X Cygni ...	20 39.0	...	35 11 N.	...	17, 21 0 M
T Vulpeculæ ...	20 46.8	...	27 50 N.	...	13, 6 0 M
Y Cygni ...	20 47.6	...	34 14 N.	...	13, 17 40 m
δ Cephei ...	22 25.0	...	57 51 N.	...	and at intervals of 36 0 m
				Jan.	16, 5 0 m
					17, 20 0 M

M signifies maximum; m minimum.

Meteor-Showers.

	R.A.	Decl.	
Near π Orionis	...	72 ... 5 N.	
,, κ Cygni	...	295 ... 53 N.	Slow, trained.