

hundred persons are reported to have perished, and it is feared that the loss of life will prove even greater.

A WATERSPOUT passed over a portion of the town of Hagenau (Alsace) on May 23 last, doing very great damage to houses and trees.

AT Stendal (Prussian Saxony) a Committee for the erection of a monument in memory of Dr. Gustav Nachtigal has been formed, and contributions towards this object are solicited.

THE Austrian Central Tourist Club has addressed a petition to the Assemblies of all Austrian alpine provinces to pass a law prohibiting the wholesale uprooting of *Edelweiss* now carried on. The petitioners point out that hundreds of thousands of the plants are dug up and sent abroad, even to America, so that there is a fear that the favourite plant of all lovers of the Alps will be totally exterminated, except in a few remote places. In Switzerland, it is stated, for several years past there have been stringent laws in the several cantons against uprooting and selling the *Edelweiss*.

THE rôle of wind in fertilising the ground is remarkably illustrated, according to M. Alluard, by the very fertile valley of Limagne, in Auvergne. The prevalent winds there are west and south-west, and traverse the chain of the Dômes, where are vast deposits of volcanic ashes. Much of this dust is thus carried to the Limagne valley, and settles there of itself, or is carried down by rain or snow. As it contains a large amount of phosphoric acid, potash, and lime, it is highly fertilising, and its very fine state favours rapid assimilation. From observations on the Puy de Dôme, M. Alluard estimates the annual deposit at 348 to 400 grammes per square metre.

WE have received the Calendar of the University of Virginia for the academical year 1884-85. The science department appears to be exceptionally strong and well organised.

ONE result of the recent visit of the Ameer of Afghanistan to India is that his palace at Cabul is to be lit by the electric light. He ordered the necessary apparatus when at Rawul Pindi, and three Cabulese have for some time past been studying its manipulation at Bombay.

WE have received a copy of a lecture by Mr. Thomas Fletcher, delivered before the Parkes Museum of Hygiene, on "Smokeless Houses and Manufactories." It deals mainly with the lecturer's personal experiences of the employment of gaseous fuel in his private residence and manufactory at Warrington, the appliances which he has used, a comparison of the cost with that of coal, the work done, &c. In reply to a question, Mr. Fletcher expressed the opinion that radiant heat is the only possible comfortable way of heating a living-room, and that it is therefore better to mix gas with air to prevent smoke, and heat as large a surface as possible to incandescence.

ACCORDING to a report by the Director of Public Instruction in Tunis, there are at the present moment twenty primary schools in the Regency—eight in Tunis, and twelve in other towns—Susa, Monastir, Sfax, Goletta, &c. In this number are included three schools of the Israelite alliance at Susa, Tunis, and Mehdiâ. The number of pupils is 3974, composed of 2291 boys and 1683 girls. The report states that there are in addition a certain number of primary schools in which the instruction is religious. Of these there are 113 in Tunis, and about 500 in the whole Regency. For secondary instruction there are three establishments, all in Tunis. These contain 23 classes with 38 masters, giving instruction to 416 pupils, of whom 78 are French, 27 Italian, 26 Anglo-Maltese, 74 Jews, 193 Arabs, and 18 of various nationalities.

A MEETING of the National Fish Culture Association was held on Thursday last to consider the question of instituting sea tem-

perature observations with a view to gaining independent and fresh knowledge with respect to our marine food-fishes. The subject of marine stations was discussed together with other matters relative to log-books to be issued to suitable investigators.

THE additions to the Zoological Society's Gardens during the past week include a Squirrel Monkey (*Chrysolrix sciurea*) from Demerara, presented by Mr. T. C. Edwards-Moss; a Common Badger (*Meles taxus*) from Derbyshire, presented by His Grace the Duke of Devonshire, K.G., F.Z.S.; a Common Badger (*Meles taxus*) from North Wales, presented by Mr. T. W. Proger; two Common Hedgehogs (*Erinaceus europæus*), a Common Viper (*Vipera berus*) from Norfolk, presented by Mr. T. E. Gunn; a Chattering Lory (*Lorius garrulus*) from Moluccas, presented by Mr. H. D. Astley, F.Z.S.; a Red-crested Cardinal (*Paroaria cucullata*) from South America, presented by Miss Hyrzan; a White-tailed Eagle (*Haliaeetus albicilla*) from Perthshire, presented by Mr. H. Tennent Tennent; a Manx Shearwater (*Puffinus anglorum*), a Puffin (*Fratercula arctica*), British, presented by Mr. W. Graham, F.Z.S.; an Egyptian Monitor (*Varanus niloticus*) from West Africa, presented by Mr. H. Denny; an African Lepidosiren (*Protopterus annectens*) from African Rivers, presented by Mr. Cornelius Alfred Malony, C.M.G.; two Slowworms (*Anguis fragilis*), British, presented by Mr. F. J. Guy; a Sharp-nosed Crocodile (*Crocodylus acutus*) from Jamaica, deposited; a Collared Fruit Bat (*Cynonycteris collaris*), an Axis Deer (*Cervus axis* ♀), a Hybrid Lühdorf's Deer (between *Cervus lühdorfi* and *Cervus canadensis* ♂), a Burrhel Wild Sheep (*Ovis burrhel*), two Triangular-spotted Pigeons (*Columba guinea*), a Variegated Sheldrake (*Tadorna variegata*), a Herring Gull (*Larus argentatus*), twenty Spotted Salamanders (*Salamandra maculosa*), thirty Pleurodele Newts (*Molge waltii*), bred in the Gardens.

ASTRONOMICAL PHENOMENA FOR THE WEEK, 1885, JUNE 14-20

(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 June 14

Sun rises, 3h. 44m.; souths, 11h. 59m. 59^o 9s.; sets, 20h. 16m.; decl. on meridian, 23° 18' N.; Sidereal Time at Sunset, 13h. 49m.

Moon (at First Quarter on June 19, 14h.) rises, 5h. 46m.; souths, 13h. 38m.; sets, 21h. 25m.; decl. on meridian, 17° 37' N.

Planet	Rises		Souths		Sets		Decl. on meridian
	h.	m.	h.	m.	h.	m.	
Mercury ...	2	58	10	56	18	54	20° 45' N.
Venus ...	4	26	12	48	21	10	24° 11' N.
Mars ...	2	18	10	7	17	56	19° 17' N.
Jupiter ...	9	28	16	37	23	46	12° 32' N.
Saturn ...	4	7	12	16	20	25	22° 28' N.

Phenomena of Jupiter's Satellites

June	h.	m.	III. tr. ing.	June	h.	m.	II. occ. disap.
14	20	15	III. tr. ing.	18	23	17	II. occ. disap.
	22	37	I. ecl. reap.	20	20	33	II. tr. egr.
16	22	24	IV. ecl. disap.				

The Eclipses of Jupiter's Satellites are such as are visible at Greenwich.

June	h.	Jupiter in conjunction with	of the Moon.
17	15	Jupiter in conjunction with	3° 44' north
18	23	Saturn in conjunction with	the Sun.

GEOGRAPHICAL NOTES

AFTER having lost, in December last, their director, Prof. W. G. Erofeeff, and in January one of their most active members, W. A. Domzer, the Russian Geological Commission has again sustained a heavy loss in the death of the distinguished G. P. Helmersen. According to the notice in the last issue of the *Izvestia* of the Commission he began his scientific career more than sixty years ago, at the Dorpat University, and when