

Meteor-Showers

	R.A.	Decl.
Near ν Herculis	236	47° N.
η Ophiuchi	254	21 S.
ζ Draconis	262	64 N.
α Aquilæ	298	5 N.

GEOGRAPHICAL NOTES

WE are glad to know that General R. Strachey, R.E., F.R.S., has agreed to accept the presidency of the Royal Geographical Society, in succession to Lord Aberdare. The Society's honours for the present year will be conferred as follows:—The Founder's Medal to Lieut.-Colonel T. H. Holdich, R.E., for the eminent services he has rendered to geography in Afghanistan; the Patron's Medal to the Rev. George Grenfell, for the extensive explorations he has carried out during his thirteen years' residence in Africa, partly in the Cameroons country and more recently in the Congo region; the Murchison Grant to Mr. George Bourne, second in command and sole survivor of the Landsborough Expedition, which crossed the continent of Australia in 1861; the Back Premium to Sarat Chandra Das, for his researches in Tibet; the Gill Memorial to Mr. J. F. Needham, for his explorations in the Lohit Valley of the Brahmaputra. The following have been made Honorary Corresponding Members:—H.R.H. Krom Mun Damrong Rajah Nubhar, Director-General of Surveys and Minister of Public Instruction, Siam; Dr. Alfred Kirchhoff, Professor of Geography at Hallé University, and President of the Hallé Geographical Society; and Dr. E. Naumann, late Director of the Geographical and Topographical Survey of Japan.

THE paper read at the Royal Geographical Society on Monday was by General J. T. Walker, F.R.S., on the Lu River of Tibet, the Lu-Kiang, or Lu-tse-Kiang of the Chinese. This river is generally held to be the source of the Salwin, but General Walker adduced many reasons for maintaining that it is more probably that of the Irrawadi. In the course of an able paper, the result of much research, General Walker gave a most useful summary of exploration in this highly interesting hydrographical region; more particularly insisting on the value of the work of the late Abbé Krick, who ascended the Lohit in 1852, but of whom little is known in this country. General Walker made out a strong case for his position, but the leading conclusion of his valuable paper is that further exploration in this remarkable region is urgently demanded. Probably no region of the earth would yield more valuable results to scientific geography.

ACCORDING to the latest news, Mr. Stanley is well up to time in his ascent of the Congo with the Emin Pasha Expedition. He is at present on his march across country from Matadi, at the lower end of the Livingstone Falls, to Leopoldville, on Stanley Pool. It is hoped that when he reaches the Pool he will find sufficient vessels in readiness to convey his large following up the river without delay. So far the Expedition has been exceedingly fortunate.

THE statement that Baron Nordenskjöld will undertake an Antarctic expedition at the expense of the King of Sweden and Mr. Oscar Dickson is, to say the least, premature. We are informed by Mr. Dickson that Baron Nordenskjöld is "willing" to undertake such an expedition, but that if he does so neither the King of Sweden nor Mr. Dickson will find the money. No doubt Baron Nordenskjöld would be an excellent leader for such an expedition, and as Committees have been formed both in this country and in Australia to promote Antarctic exploration, would it not be wise in them to unite their forces, and place themselves in communication with the Baron? Those who are competent to give an opinion on the subject maintain that an Antarctic expedition is much less risky than one to the other Pole. There would be no difficulty in a party wintering on some part of the Antarctic continent; a vessel could cruise round the verge of the ice during the winter and watch a favourable opening, of which immediate notice could be given to the exploring party, while a third vessel could leave New Zealand at a suitable time with additional supplies. No doubt the subject will again be brought up at the next meeting of the British Association, when it is hoped a strong and active Committee will be appointed. Baron Nordenskjöld will be among the distinguished foreigners invited to the meeting, and we hope he will accept the invitation.

THE Germans continue to show great activity in the exploration of their portion of New Guinea. Freiherr von Schleinitz has recently accomplished a running survey of Huon Gulf, and besides establishing the direction of the coast-line and the positions of reefs, has laid down eight hitherto unknown harbours and discovered nine new rivers. Some of them, especially the Markham River, would form excellent routes for the exploration of the interior; the broad valley of the latter extends for miles between high ranges of mountains. The south coast of Huon Gulf consists exclusively of primitive and metamorphic rocks, with older sedimentary rocks and volcanic formations. At a later date a further survey was made of the coast from Astrolabe Bay to the mouth of the Empress Augusta River, and led to the discovery of a series of bays, harbours, islands, and rivers.

M. GRIMAILO, in company with his brother, an engineer, and six Cossacks, has set out for a further exploration of the Pamir.

DR. LABONNE left Cherbourg a few days ago for a further exploration of the geysers and glaciers of Iceland.

PRELIMINARY NOTE ON THE FOSSIL REMAINS OF A CHELONIAN REPTILE, CERATOCHELYS STHENURUS, FROM LORD HOWE'S ISLAND, AUSTRALIA¹

THE interesting remains of which I propose to give a brief notice in the present communication are contained in a friable sandstone (apparently formed of concreted blown sand), and they have a very recent appearance. The age of the deposit in which they are found is unknown, but it is probably Quaternary. The specimens have been for some years in the palæontological collection of the British Museum, and, for the most part, they have not yet been submitted to careful examination. But I learn that the greater number of them were long since rightly determined to be Chelonian by Mr. Davis, and set aside as such.

Several of the most important of these numerous and, in general, very fragmentary bones were originally found imbedded close together in the same block of sandstone. They consist of a great part of a pelvis, a caudal vertebra, and an imperfect skull. Of the pelvis, a right ischium and a pubis are imbedded in the rock, while an imperfect right ilium, which fits well on to the ischium, is separate; all these bones are unmistakably Chelonian. The caudal vertebra has remarkable peculiarities. It resembles an ordinary Chelonian caudal vertebra from the anterior half of the tail, in its general characters; but it is strongly opisthocœlous, the centrum having a deep cup behind and a correspondingly curved articular head in front. From the posterior part of the ventral face two stout processes diverge, and present terminal rounded facets for the rami of the large chevron bone which must have articulated with them. As a general rule, the caudal vertebræ of Chelonia are procœlous—but *Chelydra* and *Gypochelys* (perhaps also *Staurotyphus* and *Platysternum*) form well-known exceptions,² in so far as the vertebræ behind the third and fourth are strongly opisthocœlous. In fact, the vertebra in question closely resembles the sixth or seventh of *Chelydra* or of *Gypochelys* (see Figs. 1 and 2). In the first, however, the transverse processes are very much stronger, and the pentagonal platform into which the upper surface of the neural arch expands, in place of a neural spine, is as long as the vertebra, instead of being only about half as long. The stout pre-zygapophysis of the right side is broken off, leaving only the base visible in the fossil.

¹ Paper read at the Royal Society, by Prof. Thomas H. Huxley, F.R.S., on March 31.

² The opisthocœlous character of most of the caudal vertebræ of *Chelydra* was first pointed out by Von Meyer in his description of the Eningen *Chelydra*. Baur ("Osteologische Notizen," *Zool. Anzeiger*, No. 238, 1886) has gone fully into the question, and has pointed out the exceptional nature of their structure among the Chelonia. Since the above paragraph was written, Dr. Günther has kindly enabled me to examine a spirit specimen and a skeleton of *Platysternum*. The caudal vertebræ resemble those of *Chelydra*, except that the last nine are procœlous, while that between these and the more anterior opisthocœlous vertebræ is nearly flat at the ends. In this, as in other respects, *Platysternum* presents characters intermediate between *Chelydra* and the ordinary *Emyda*. Prof. Cope ("Vertebrata of the Tertiary Formations of the West," 1883, p. 111) ascribes opisthocœlous caudal vertebræ to the *Bœnida*, but no figures or descriptions of such vertebræ are given. Of the opisthocœlous Chelonian vertebræ figured in Plate XXIV. of the "Report of Extinct Vertebrata obtained in New Mexico" (1887), it is expressly stated that their "correct reference cannot now be made" (p. 43).