

GEOGRAPHICAL NOTES.

IN the *Bulletin* of the California Academy of Sciences for June, Mr. C. M. Richter re-examines all the data relating to the ocean currents contiguous to the coast of California, with the result that existing charts are in many cases found to be wrong, and that great diversity of opinion exists as to the real character and origin of these currents.

IN the new number of the *Mouvement Géographique* the various rumours that have been afloat as to disasters which have happened to Mr. Stanley's Expedition are examined, and, when tested by known facts and the latest trustworthy information from Mr. Stanley himself and his officers, are shown to be without justification.

MR. MONTAGU KERR sailed from London last Thursday for Zanzibar, for the purpose of attempting to cross Africa by a new route. It is a mistake to refer to Mr. Kerr's private expedition as intended for the further "relief" of Emin Pasha. It has nothing whatever to do with Emin Pasha; though, no doubt, Mr. Kerr will shape his course through Masai Land towards Wadelai as his first stage, and may be guided by Emin's advice as to his further course. His main object after reaching Wadelai will be to proceed in a north-westerly direction towards Lake Chad, solving as far as possible by the way the hydrography of the Welle and Shari regions. After exploring around Lake Chad, Mr. Kerr may make for the Niger, though it is possible enough he will go on northwards in the direction of Tripoli. Since his return from his South African journey, Mr. Kerr has been diligently qualifying himself for scientific observation.

THE paper on Monday at the Royal Geographical Society was one of unusual originality; it described Mr. A. D. Carey's two years' journey around and across Turkistan and into the north of Tibet. Mr. Carey, who was accompanied by the well-known Central Asiatic traveller, Mr. Dalgleish, describes so many new features that it is impossible to follow his route throughout on any map. Although his route coincided to some extent with those of Prejevalsky, he has been able to supplement the Russian traveller's observations in many directions. Mr. Carey, starting from Leh in Ladak, crossed the western part of Tibet and the western continuation of the Altyn Tagh, to Kiria in the south-west corner of the great Tarim Desert. Thence along the Khoten River he reached the Tarim, the course of which he followed, with excursions to various places on the route, as far as Lob Nor. The hydrography of this interesting river Mr. Carey has helped considerably to clear up. Some time was spent about the Lob Nor region, and then Mr. Carey, amid many difficulties, endeavoured to penetrate as far as possible into Tibet; but as his time was limited he did not succeed in getting further than the Ma Chu, about half-way between the Kuen Lun and the Tangla Range. But in his wanderings to and fro in the great marshy and desert plain that lies between the Altyn Tagh Mountains and the Kuen Lun, he has added something to our knowledge of one of the most interesting regions of Central Asia. From the Ma Chu, Mr. Carey struck almost direct northwards by Sachu to Hami, across the Gobi Desert. Then by a great sweep he traversed the northern border of Turkistan, by Turfan, Karashahr, Kuchir, Aksu, and Yarkand, back to Leh, two years after he left it. As he says, he thus completed the circuit of Chinese Turkistan, and, Kashgar excepted, visited every important place in it. The chief characteristic of the country is its extreme poverty. It may be described as a huge desert fringed by a few small patches of cultivation. The only really good strip of country of considerable size is the western portion, comprising Kargalik, Yarkand, and Kashgar. To the north a succession of very small oases extends along the foot of the Tian Shan Mountains, the stretches of intervening desert becoming longer as the traveller goes further to the east. The eastern extremity of the province is desert pure and simple, and so is the southern extremity as far west as Kiria, with the exception of the small oases of Charchand and Chaklik. The central portion is chiefly desert, except along the Tarim and in the Lob Nor region. Mr. Carey gives some useful notes on the different classes of people he met with, and occasionally a jotting on the natural history of the region. But the chief scientific result of Mr. Carey's journey is the excellent map which Mr. Dalgleish carefully plotted every day, and which covers many sheets; it is being reduced, and will be published by the Royal Geographical Society.

THE correspondence from Major Bartlet, Mr. Stanley's second in command, from his station on the Aruwimi, shows that all is going well, and that if there are any dangers they will be due to the Arabs, and not to the natives. For the many rumours of disaster to the Expedition there is no foundation in fact; there is positively no news from Mr. Stanley since he left the Aruwimi, and in this case no news is good news, for bad news travels as rapidly in Africa as elsewhere.

THE ANNIVERSARY MEETING OF THE ROYAL SOCIETY.

THE Royal Society held its Anniversary Meeting yesterday for the purpose of electing officers and presenting medals. The President delivered the address which we print below. After the meeting the Fellows dined together at Willis's Rooms, and the attendance was larger than on any previous occasion, nearly 200 Fellows being present.

During the past year death has removed from us fifteen of our Fellows and one foreign Member. It is remarkable that no less than six of these had reached the age which the Psalmist takes for the extreme duration of human life, while the average age of the whole exceeds seventy-five years. Within two months after our last anniversary Sir Joseph Whitworth died, at the age of eighty-four. Starting from a humble beginning, he attained, through his talent and steady application, a commanding position among constructors of machinery and heavy ordnance, and the truth of surface and accuracy of dimensions of what came from his workshop are probably unrivalled.

Sir Walter Elliot, who was still older, combined a high official position in India with the pursuit of natural history, and was the author of several papers in scientific serials. John Hymers and Thomas Gaskin were mathematicians well known to Cambridge men of some standing, and were both elected Fellows of our Society nearly half a century ago. The former was the author of various mathematical text-books, which for a long time were those chiefly used in their respective subjects by Cambridge students for mathematical honours. The latter, once a colleague of my own in a mathematical honour examination, was famed for his skill in the solution of problems, though he has not left much behind him in the way of mathematical writings, beyond a book containing the solution of a variety of problems. In Robert Hunt we have lost an aged Fellow whose name is well known in connection with the study of the action of light in producing chemical changes, and on vegetation. In Joseph Baxendell we had a man who during a long life was a diligent observer of astronomical and meteorological phenomena. John Arthur Phillips, a geologist who attended most particularly to the chemical origin of mineralogical and geological phenomena, was the author of several papers, some of which appeared in our own Proceedings. It is not long since Sir Julius von Haast was among us, apparently in full vigour, having come to England in connection with the Colonial Exhibition, and now this distinguished geologist and naturalist is no more. The Earl of Idlesleigh was suddenly carried off in the midst of the duties belonging to an important office in the State, whilst Beresford-Hope has succumbed to an illness of some duration. These two joined us under the statute which enables the Council to recommend to the Society for election, in addition to the fifteen who are selected in the ordinary way, and nearly always on account of their scientific claims, persons who are members of Her Majesty's Most Honourable Privy Council, and whose ability is thus attested, though they are not usually men of science. From the list of foreign Members, one name has disappeared which has become a household word among the physicists of all civilized nations. The name of Kirchhoff will ever be remembered as that of the introducer, conjointly with Bunsen, of spectral analysis into the regular work of the chemical laboratory, a step which has been so fertile in results. To him too we owe the reference of the dark lines of the solar spectrum to the absorption of portions of light coming from deeper portions of the sun by the vapours of substances which in the condition of incandescent vapour themselves emit bright lines in corresponding positions; and to him therefore we are indebted for the detection of chemical elements in the sun and stars, though partial anticipations of these discoveries had been made by others. The fertility of these researches, and the attention which they consequently excited, should not make us