

Science News a Century Ago

Captain Back's Arctic Expedition

The Times of October 13, 1835, contained a statement by William Bowles, the chairman of the Arctic Land Expedition, to the subscribers who financed the expedition. In the course of the statement, he reviewed the circumstances which led to the project of sending out a party to find Captain Ross, referred to the eminent services of Captain Back, his companion Mr. King the surgeon and to the assistance given in the United States and Canada and to the eight men who had made the boat journey to the coast with Captain Back. The subscriptions, Mr. Bowles said, included £2,000 from the Government, £500 from the Hudson's Bay Company, £105 from the Lord Mayor and Corporation of London, £105 from the Committee of Lloyds and £100 from the Corporation of Trinity House. "The Committee," he said, "has the highest possible gratification in announcing that, on the recommendation of the Lords Commissioners of the Admiralty, His Majesty in Council has been pleased to grant an order, dispensing in Captain Back's case, with the actual service afloat, which according to the rules of the Navy, would have been otherwise requisite to qualify him for a step in his profession. He has thus been promoted in the most gracious manner, without delay; and a munificent individual (Robert Holford, Esq., of Westcliff, Isle of Wight) has remitted 100£ to be divided in equal shares among his boat's crew, the partakers of his greatest difficulties and dangers".

Lyell and Mantell

SHORTLY after his return home from his tour in France, Switzerland and Germany, Lyell on October 14, 1835, wrote from London to Dr. Gideon Mantell at Brighton giving him an account of some of his geological excursions. In the course of his letter, he said: "I entered Switzerland by Porrentrui, and there I had Thurmann for my guide, who gave me in a short time a beautiful insight into the structure of the Jura . . . and I was glad to verify his observations in the field, and to see his beautiful collection of Jurassic shells, and his attempt to assimilate the oolitic series and their fossils of the Swiss Jura with our English oolitic groups. I afterwards had a work in another part of the Jura with some geologists at Neuchâtel, where the chalk, as it appears to me by its fossils, fills the bottom of the valleys of the Jura limestone. I next had a work with Studer at Berne, and then had a work of about six weeks in that part of the Swiss Alps which is called the Bernese Oberland. . . . People seem to be in high spirits here on the success of the Dublin meeting. Agassiz looks in good health, and is satisfied with the great progress he has made, and looks forward with great pleasure to a first visit to Brighton. . . . I have been writing this by candle-light after the labours of the day, and as you know my eyes of old, you will excuse its not being in my own handwriting. . . ."

Prof. Tiedemann in Edinburgh

ON October 17, 1835, quoting from the *Scotsman*, *The Times* said: "The celebrated Professor Tiedemann of Heidelberg has been in Edinburgh for some days. He is collecting materials for a work on the comparative anatomy of the brain and has visited

London, Glasgow and Dublin. In Edinburgh he has pursued his researches in the Museum of the Royal College of Surgeons, the College Museum and the Museum of the Phrenological Society, which last he has visited on three successive days for the purpose of weighing and measuring the skulls of different nations". Tiedemann, who was born at Cassel in 1781 and died in 1861 at the age of seventy-nine years, was made professor of zoology, anatomy and physiology at Heidelberg in 1816.

Societies and Academies

PARIS

Academy of Sciences, August 26 (*C.R.*, 201, 461-476). MARCEL DELEPINE: The work of the late Antoine Nicolas Guntz. PIERRE DE VANSAY: Drawing the azimuth line on a Mercator projection. S. CARRUS: The successive evolutes of a skew curve. ARNAUD DENJOY: Groups of homographic substitutions. RAPHAEL SALEM: The generalisation of certain lemmas of Van der Corput and applications to trigonometrical series. MARCUS FRANCIS: The electrolytic method of preparing thin deposits of U_3O_8 . Starting with a salt of uranium not carefully purified, other radioactive substances deposit first during electrolysis and a satisfactory deposit of uranium oxide cannot be obtained. LUBOMIR DONTCHEFF and CHARLES KAYSER: The signification of respiratory coefficients below 0.7 in certain poecilotherms.

September 2 (*C.R.*, 201, 477-492). HENRY GAULT and MATUS COGAN: Formyltropic ester. This is produced by the condensation of formylphenylacetic ester with formaldehyde. FRANÇOIS DUPRE LA TOUR: Polymorphism in the series of the normal fatty diacids. JACQUES DE LAPPARENT: An essential constituent of fullers earth. HENRI LONGCHAMBON: The essential mineralogical constituents of clays, and especially of fullers earth. ANDRÉ CAILLEUX: Traces of important interglacial aerial action in Poland. GEORGES BOURGUIGNON: Chronaxy in voluntary movement and in pain in normal man. Static chronaxy and dynamic chronaxy. MME. ISABELA POTOP: Researches on the acid-soluble phosphorus, the mineral phosphorus and the ultra-filtrable phosphorus of the blood.

September 9 (*C.R.*, 201, 493-508). The president announced the death of LÉON FREDERICQ, *Correspondant* for the Section of Medicine and Surgery. PAUL LÉVY: The law of large numbers for connected variables. G. PFEIFFER: A special method of integration of complete systems of linear partial differential equations of the first order of an unknown function. ARNAUD DENJOY: The geometry of homographic groups. ANDRÉ BRIOT and BORIS VODAR: The absorption spectra in the ultra-violet of gaseous, dissolved or liquid ammonia. PIERRE DONZÉLOT and MAURICE CHAIX: The Raman spectra of substances with two benzene nuclei. The substances examined included diphenyl and compounds of the type $C_6H_5.X.C_6H_5$, where X was CH_3 , O, S, Se, $CH(OH)$ or Hg. Mlle. BERTHE BIECHELER: The existence of a chromatic cyclosis in the peridineans. JOSEPH KAHN and MME. LUBOV CHEKOUN: The disengagement of ammonia by the brain, following a state of natural stimulation.