

Science News a Century Ago

The House of Commons and Railway Bills

In the course of a debate in the House of Commons on February 22, 1836, on the procedure to be taken regarding the second reading of railway bills, Sir James Graham is reported as follows: "When they took into consideration the number of those bills that had already been introduced, the number that was still likely to be introduced and the amount of capital—not less than £45,000,000 he understood—that was about to be embarked in such speculations, he was sure that it would be admitted on all hands that the subject was one of the highest importance, and well worthy of the attention of the Government and of that house. It was to be remarked, that with regard to all other public works they had well framed standing orders; but as regards railways, the standing orders relating to the construction of canals had been rudely and imperfectly made to fit railways. . . . So far from looking upon the postponement of the second reading of the railway bills at present before the house as inadvisable, he should like to see the progress of all railway bills postponed for a whole session. He should like to appeal from the country drunk to the country sober. There seemed to exist at present a perfect mania for speculations for this description." A few days later *The Times* stated that a Select Committee of the House had drawn up a statement showing that thirty-two railway bills, involving an estimated outlay of £28,000,000, had been read a first time. The petitions submitted to the House in connexion with these bills included 36,978 assents, 6,575 dissents and 7,475 neuters.

Projects for Arctic Explorations

At a meeting of the Royal Geographical Society held on February 22, 1836, three communications regarding arctic expeditions were read, by Sir John Franklin, Sir John Barrow and Captain Beaufort respectively. After Sir John Franklin had explained in detail his plan for an expedition to examine the north-eastern extremity of the American continent by way of Wager River, Hudson's Bay, Sir John Barrow stated his opinions at length on the existence and practicability of a north-west passage between the Atlantic and Pacific Oceans, observing that the question had become a national one and that an obligation had been contracted to persevere in the attempt to solve it, so long as any hope of success remained. Captain Beaufort said that he entirely agreed with Sir John Barrow as to the interest attached to the discovery of a passage and thought that there would ever be "intolerable disgrace" if after all that England had done towards narrowing the field of investigation, it were first actually traversed by a foreign flag. He thought Sir John Franklin's plan the best and he urgently exhorted the Council to recommend it to the favourable consideration of His Majesty's Ministers.

The Royal Society

At a meeting of the Royal Society held on February 25, 1836, a paper was read "On an Artificial Substance resembling Shell" by Leonard Horner, the paper being accompanied by an account of an examination of the substance by Sir David Brewster. Horner had noticed a singular incrustation on the surfaces of a wooden dash wheel, used in bleaching,

at the cotton factory of Messrs. J. Finlay and Co., at Catrine in Ayrshire. He described it as being compact in texture, with a metallic lustre presenting in some parts a beautiful iridescent appearance. Its resemblance to shell had led him to inquire into its structure and the circumstances of its formation. The substance was found to consist of carbonate of lime and animal matter. The former was due to the cotton cloths being steeped in lime water, while the latter was traced to the glue used to stiffen the warp for the looms. Brewster, in his examination of the mechanical and optical properties of the substance, had found it to be composed of laminae the plates of which when separated were almost always covered with an iridescent film of the most brilliant and generally uniform tint, which exhibited all the colours displayed by these films or polarising laminae. The new substance, he said, might be regarded as having the same optical relation to calcareous spar that mother of pearl had to arragonite.

Arago and French Forests

In the French Chamber of Deputies on February 27, 1836, a discussion took place on a motion by the Minister of Commerce relating to the question of a general clearance of woods in France. Among the speakers was Arago, then regarded as one of the leading men of science. In the course of his remarks, Arago said that the clearing of woods may be attended with effects of various kinds. A report of Arago's speech appeared in the *Moniteur* and a translation of it in *The Times* of March 2, 1836. "You will, perhaps, be surprised, he said, to hear that a few centuries ago, in the vicinity of Paris, the summer heat was much greater than it is in our own time. This is a fact, however, which is proved by various documents, among others a charter allowing the vine growers of Amiens to compete with the other districts of France for the honour of supplying the most perfect wine to the table of Philip Augustus. It is certain that forests exercise a great influence over electric phenomena. In clearing the mountains of woods, you would perhaps increase the liability to hail of the adjacent districts to a ruinous extent. In countries cleared of woods all rivers have the character of torrents. In a short time volumes of water are sent forth with excessive rapidity, and in many parts of the year they are quite dry. In Italy, since they have cleared away the wood from the Alps, the rivers carry down a quantity of mud much greater than formerly. I am borne out in this fact by the opinion of M. de Prony. I think there is room for an inquiry on the matter. You will find in the archives of science sufficient to direct your decision."

Deaths of Philosophers

THE issue of February 27, 1836, of the *London Medical and Surgical Journal* has the following note: "The first public meeting of the Royal College of Physicians took place on Monday last, and was attended by the Prime Minister, Lord Melbourne, the Archbishop of Canterbury, several of the judges and other distinguished characters, and a great number of the profession. Sir H. Halford read a paper on the 'Piety of the most renowned British Philosophers in their last moments'; among whom he mentioned the names of Locke, Boyle, Newton, Addison, Johnson, etc. The composition and style of the paper were chaste and elegant, and the crowded assembly heard it read with deep attention and much pleasure."