

Science News a Century Ago

The Scientific Congress in France

Quoting from *Galignani's Messenger*, the *Times* of September 22, 1834, recorded that "The Scientific Congress, which has been sitting at Poitiers has closed its session. The number of its members amounted to 230". Among the questions discussed was that of the policy of employing troops on public works such as roads, while the agricultural section presented a resolution that "Salt may be beneficially used in the feeding of cattle, and in improving land, consequently the tax upon this article, which prevents it being so used, ought to be reduced". The Congress was deeply concerned with "the immorality which degrades many of the literary productions of the present day"; and it declared that "the French Academy at Rome should be suppressed being no longer of any utility". The proceedings of the Congress, it was said, have proved that the institution cannot fail to increase the welfare and happiness of society, and it was decided that the next meeting should take place at Douai in 1835.

Opening of Leeds and Selby Railway

One of the oldest sections of the London and North Eastern Railway is that from Leeds to Selby about twenty miles long. Authorised in May, 1830, it was constructed by J. U. Rastrick (1780-1856) and was opened on September 22, 1834. The first train left Leeds at 6.0 a.m. drawn by an engine of 18 horsepower named *Nelson*. "To this were attached," says the *Annual Register*, "three of the first class carriages, and six carriages of the second class, the former carrying eighteen passengers each and the latter twenty-four. The requisite preparations having been completed, a start was made; but, the rain having rendered the tram-rails so slippery that the wheels of the engine turned round at times without any sensible locomotion, only two miles were completed in a space of forty minutes. It was, therefore, thought advisable to lessen the drag of the machine as much as possible; and with that view the passengers, who occupied the six second class carriages, were stowed into five of them, and the sixth was left behind. The engine, however, proceeded at the same slow pace for some time longer, amid the jeers and laughter of the bystanders, who called to the police officers and others attendant upon her, to put their shoulders to and push her along". After stopping at Garforth viaduct "the engine shot away with her load, and did the remaining fourteen miles in forty-two minutes, being at the rate of twenty miles an hour". The whole journey occupied two hours and twelve minutes, but the return journey was made in one hour sixteen minutes. Within a year of its opening, the railway, says Sherrington, had in operation combined rail and water passenger fares between Leeds and Hull, and combined rail and road fares between Leeds and York, both through Selby.

Chemistry Lectures at the Royal Institution

In an advertisement in the *Times* of September 27, 1834, under the heading "Royal Institution of Great Britain" it was announced that "The extended and practical Course of Chymical Lectures and Demonstrations for medical and general students delivered in the Laboratory of this Institution, by Mr. Brand and Mr. Faraday, will commence on Tuesday, Oct. 7,

at 9 o'clock in the morning, and will be continued on Tuesdays, Thursdays and Saturday at the same hour. Two courses are to be given during the season, which will terminate in May. For prospectus of the lectures and terms of admission application may be made to the Lecturers or to Mr. Fincher at the Royal Institution". Joseph Fincher was then the assistant secretary of the Institution. Speaking of the lectures, the physician Thomas Gordon Hake (1809-1895) in his "Memoirs of Eighty Years", published in 1892, said: "There was no medical school at St. George's, the anatomical students went to Great Windmill St., where Mr. Caesar Hawkins lectured and taught. The chemical students went to the Royal Institution in Albemarle Street, where Faraday and Brand were professors. The lectures were then delivered at eight in the morning; beautiful and perfect they were; the attendance was very thin. I am proud to remember that I imbibed my first ideas of chemistry at such a fountain head. Faraday was most charming, most unpretending; his experiments never failed, nor did those of his colleague who was a model lecturer; gentlemanly, perfect of expression, exact of execution."

Societies and Academies

PARIS

Academy of Sciences, July 30 (*C.R.*, 199, 329-392). GEORGES CLAUDE: A floating Claude-Boucherot installation. D'ARSONVAL: A visit to the Tunisie. Remarks on the Claude-Boucherot installation for utilising the thermal energy of the sea. NATAN ARONSAJN: Dirichlet's series with linearly independent exponents. EUGENE REMES: The effective calculation of Tchebitchev's polynomials of approximation. STEFAN BERGMANN: Integral and meromorph functions with two complex variables. GEORGES ALLARD: A general method of statistics applicable to indiscernible particles. A method for obtaining the law of statistical distribution of the molecules of a gas. This is an extension of Planck's method, and allows a closer analysis than the methods of Bose-Einstein and of Fermi-Dirac. PIERRE LEJAY: Gravity observations in Malaya, the Dutch Indies, Cambogia and Cochin China. Proof that work done with the Holweck-Lejay pendulum is in close agreement with that of Vening Meinesz. D. G. DERVICHIAN: Polymorphism in the monomolecular layers of fatty acids at the surface of water. THEODORE KAHAN: The thermal variation of the structural demagnetising factor in nickel and cobalt. The existence of the structural demagnetising field in nickel and cobalt is confirmed by evidence of its thermal variation. The factor of this field decreases as the temperature rises. MORICE LETORT: The kinetics of the thermal decomposition of the vapour of acetaldehyde. The true order of the reaction, derived from the initial data, is 1.5: a higher value, approximately 2, results from the wall effect. WILFRIED HELLER: The coagulation of hydrophobe sols by freezing in relation with mechanical coagulation. ANDRE DE PASSILLE: Study of the dissociation of the ammonium phosphates. Data are given for the dissociation of $(\text{NH}_4)_2\text{HPO}_4$ and anhydrous $(\text{NH}_4)_3\text{PO}_4$. The study of the dissociation of the latter proves the existence of a compound $(\text{NH}_4)_5\text{H}(\text{PO}_4)_2$. RENE PERROTTE: Ricinic acid and 12-ketostearic acid. M. TIFFENEAU and MLE.