

Science News a Century Ago

The Insulating Power of Fluids

IN 1837, Faraday was making researches connected with the induction, and the conduction of electricity by various types of insulators. As is generally known, his observations were entered in his diary in numbered paragraphs, the entries for September 6, 1837, running from No. 3875 to No. 3891. The first few of these were as follows:

"3875. Tried insulating power of some fluids by dipping a glass rod in them and then touching a gold leaf electrometer with the wet part, the finger being also applied to the wet part about the third of an inch from the electrometer. Thus a film of the liquid of about half an inch long formed the communication.

"3876 *Oil of turpentine*—good and filtered; insulated well.

"3877 *Oil of turpentine*—old and with water at the bottom of the bottle; discharged the electrometer at once.

"3878 *Naphtha (french)*—insulated well.

"3879 *Oil gas liquid*— Do.

"3880 *Caoutchoucine*—discharged moderately.

"3881 *Cocoa nut oil (the expressed solid part)*—discharged at once.

"Hence *Oil of turpentine, Naphtha and Oil gas liquid* appear as if they would do for transinductive media."

Discovery of the *Victoria regia*

AT a meeting of the Botanical Society held on September 7, 1837, the secretary read a communication from Robert H. Schomburgh dated New Amsterdam, Berbice, May 11, 1837, on a new genus allied to the water-lily, which by permission of Her Majesty he had named *Victoria regia*. The discovery of the plant by Schomburgh, in the River Berbice, in British Guiana, was made in January. When on the river he saw something which raised his curiosity, "All calamities were forgotten; I felt as a botanist and felt myself rewarded. A gigantic leaf, from five to six feet in diameter, salver-shaped, with a broad rim of light green above, and a vivid crimson below, resting upon the water: quite in character with the wonderful leaf was the luxuriant flower consisting of many hundred petals. The smooth water was covered with them, I rowed from one to another, and observed always something to admire. . . . We met them afterwards frequently, and the higher we advanced the more gigantic they became".

British Association at Liverpool

ON Saturday, September 9, 1837, the General Committee of the British Association met in the library of the Liverpool Athenaeum, the Marquis of Northampton being in the chair. In the course of the meeting it was announced that the Government, at the request of the council, had consented to repeal the duty on the importation of philosophical instruments, and also to extend the Ordnance Survey to Scotland. It was also stated that the council had directed its attention to the establishment of a law of universal copyright, and had entered into communication with M. Guizot, Minister of Public Instruction in France, and Mr. Sergeant Talfourd.

It was submitted and agreed to that admission to the General Committee, then open to the presidents

and vice-presidents and office-bearers of chartered philosophical societies and contributors to the *Transactions*, should be extended to the officers of the Literary and Philosophical Society of Newcastle, the Natural History Society of Newcastle, the Wernerian Society of Edinburgh, the Royal Geological Society of Cornwall, the Geological Society of Dublin and the Statistical Societies of London and Manchester.

Babbage's "Bridgewater Treatise"

IN May 1837, Babbage published "The Ninth Bridgewater Treatise. A Fragment". It was adversely criticized in the *Mechanics' Magazine* of September 9, 1837, in which it was said that "almost every chapter is composed of mere scraps of composition, without any attempt to unite them into one whole; some chapters have no end; many more have no beginning and one at least might be fairly said to have neither beginning, middle nor end. . . . It is perhaps hardly necessary to do more", said the reviewer, "than state the plain fact that the main object of this Ninth Bridgewater Treatise is professedly to raise our conception of the power and wisdom of the Creator, by comparing the mechanism of the Universe with that of Mr. Babbage's calculating engine!"

Indulgent Examiners

THE *Lancet* of September 9, 1837, contains the following story from a correspondent, entitled "A New Method of Passing Apothecaries Hall": "Candidates who are rejected are most strongly recommended to commence crying immediately after the sentence of the Examiners is pronounced; this mode of appeal to the worthies of the Hall being likely to prove effectual for candidates in that predicament. A case in point occurred last week. A great boy on the wrong side of thirty left the room crying aloud. The sentimental event touched the feelings of the examiners and the scientific youth was called back after a few minutes into the presence of the Board, whence he returned to the 'funking' room with his diploma, where he commenced kicking up his heels and laughing most uproariously, and finally placing his dexter thumb to the point of his nose, in an expressive manner, quitted the Hall, perplexed much to know whether the operation of sneering or laughing was most suited to the occasion".

Preservation of Bodies for Dissection

THE issue of the *London Medical Gazette* for September 9, 1837, contains the following description of the method of preserving bodies for dissection invented by M. Gannal, to whom the Academy of Sciences in Paris awarded a prize of 3,000 francs: "The process simply consists in injecting an aqueous solution of an aluminous salt by one of the carotids; some pints are sufficient; after it the body may be preserved exposed to the air for a long time without putrefaction, and sometimes at last dries and is mummified. He uses acetate of alum prepared from the acetate of lead and sulphate of alum and potash; and five or six pints of a strength that will mark 18° on Beaumé's aerometer, are sufficient to preserve a body for five or six months. He has also used simple sulphate of alum for procuring the acetate. With one kilogramme of common sulphate of alum in lumps, 250 grains of acetate of lead and two pints of water, a mixture may be obtained sufficient to preserve a body four months; or common sulphate of alum alone will make one keep for two months".