

## Science News a Century Ago

## Fox Talbot's Photogenic Drawing

AT a meeting of the Royal Society on February 21, 1839, further information on photogenic drawing was given in a letter written by Fox Talbot to S. H. Christie, the secretary, dealing with the preparation of the paper and the means of fixing the design. Having chosen a paper of good firm quality, and smooth surface, said Fox Talbot, it was dipped in a weak solution of common salt and wiped dry. One side was then treated with a solution of nitrate of silver. By alternately washing the paper with salt and silver and drying it in between times, the sensitivity of the paper was increased. With regard to the fixing of the images, the author said, that having tried ammonia and several other reagents, the first which gave him a successful result was potassium iodide, much diluted with water. On a photogenic drawing washed over with this liquid an iodide of silver was formed absolutely unalterably by sunshine.

## Lighthouses on Sandbanks

IN the February 1839 issue of the *Civil Engineer and Architect's Journal*, was an article on the "Construction of Lighthouses on Sands" by the use of the patent screw piles or screw moorings of Alexander Mitchell. On July 4, 1833, Mitchell had secured a patent (No. 6446) for a dock to facilitate the repairing or building of ships, and in this patent he described caissons held in position by means of piles fitted with broad metal screws or worms. Screws could be fitted also to mooring chains. "It having been brought to the notice of the Corporation of the Trinity House," said the *Architect's Journal*, "that the invention might be utilised for establishing lighthouses on sands, they directed an experiment be made by their engineer James Walker. The spot selected for the experiment was the Maplin Sand twenty miles below the Nore, in the mouth of the Thames." Eight screw piles were driven into the sand forming an octagon 40 ft. in diameter, with one in the centre. The piles were wrought iron tubes of 5 in. diameter, 26 ft. long, and each of them was fitted with a screw 4 ft. in diameter. They were driven into the sand 22 ft. by men working on a raft. Afterwards the tops of the piles were braced together to support the lighthouse structure. In 1839-40 a similar lighthouse was built on a submerged sandbank in the entrance to Morecambe Bay.

## Earthquake in Leicestershire

THE issue of the *Gentleman's Magazine* for February 1839 contains the following information: "Dec. 23. About four in the afternoon a smart shock of an earthquake was felt at Woodhouse Eaves in Charnwood Forest, Leicestershire. It was preceded by a loud rumbling noise, as of a wagon on the adjoining road, and the shock was sensibly felt by the numerous congregation then assembled in the new church at Woodhouse Eaves; the vibration was so strong as to loosen pieces of mortar from the roof, which several persons heard falling down the slates to the ground. It appears to have been in the direction from the south-west to the north-east or east, from which former point the wind then blew. . . . It is remarkable that an earthquake was felt at Naples about the same time. It is well known to geologists that an anticlinal line of strata is in Charnwood Forest."

## University Events

BIRMINGHAM.—The pro-chancellor (Mr. Walter Barrow) and the deputy pro-chancellor (Alderman John Henry Lloyd) have recently resigned their posts. Mr. Edmund Phipson Beale is to be nominated as pro-chancellor. Mr. Beale has been on the University Council since 1923 and became treasurer in 1930. He is a son of the first vice-chancellor, Mr. Charles Gabriel Beale, who was appointed when the University was founded. (The title 'vice-chancellor' was, some years ago, replaced by that of 'pro-chancellor', the former having devolved upon the officer originally called 'principal'.) Alderman Lloyd will still remain on the Council as a representative of the City Council.

CAMBRIDGE.—The Jacksonian professorship of natural philosophy became vacant at the end of January on the resignation of Prof. E. V. Appleton, St. John's College, who has been appointed secretary of the Department of Scientific and Industrial Research. It is recommended that candidature at the next election be limited to candidates whose work is connected with atomic physics. It is further proposed that the Jacksonian professor's duties of residence and lecturing shall no longer be specially prescribed.

Prof. P. M. S. Blackett, Langworthy professor of physics in the University of Manchester, has been appointed Scott Lecturer for the year 1939-40.

SHEFFIELD.—Prof. B. H. Bentley, formerly professor of botany in the University, has been appointed emeritus professor.

Dr. S. Glasstone has resigned his post of lecturer in physical chemistry.

## Societies and Academies

## Paris

Academy of Sciences (*C.R.*, 208, 237-312, Jan. 25, 1939).

A. GUILLIERMOND and R. GAUTHERET: Effect of pH on the vital staining of yeasts. Absorption of Neutral Red, Cresyl Blue and Nile Blue increases with rising pH; the blue dyes are absorbed by the cytoplasm, the red only in the vacuoles.

A. CHEVALIER: Species, varieties and hybrids of American cotton actually cultivated in tropical Africa, and their improvement.

E. ROUBAUD and R. DESCHIENS. Capture of infectious nematode larvæ by predatory soil fungi. Active larvæ of a species of *Strongyloides* and of a species of *Ancylostoma* were captured and digested (under laboratory conditions) by mycelia of certain soil fungi, suggesting the possibility of biological control of these disease organisms.

W. DÖBLIN: Certain aleatory movements.

A. DEMOULIN: Theory of lines traced on a surface.

G. VAN DER LYN: Analytical representation of abstract polynomials.

J. DUFRESNOY: Exceptional values of meromorph functions in the neighbourhood of a given meromorph function.

V. PLATOFF: Measurement of the reaction of a gaseous jet by the pressure it exerts on a disk.