

PROFESSOR SIGMUND FREUD

Professor Freud, who was elected a Foreign Member in 1936, received permission in June of the present year to leave Austria for England. A short time after he had taken up temporary residence at his son's house in Hampstead, an invitation was sent to him on behalf of the Society to attend one of the meetings and sign the Charter Book. Alternatively, Professor Freud was told that if he felt unable to come to a meeting, the book would be brought to him. Authority to take the Charter Book to the Professor's house had been given by the Council at their meeting on 16 June. The state of his health compelled him to choose the latter alternative.

On 23 June two officers of the Society, the Foreign Secretary and the Biological Secretary, with Mr Griffith Davies, who was in charge of the Charter Book, were heartily welcomed by Professor Freud. Madame Marie Bonaparte (H.R.H. Princess George of Greece) who, it will be remembered, took Professor Freud from Vienna to her house in Paris where he rested before resuming his journey to London, and Dr Anna Freud also received the deputation. After the Charter Book had been signed an inscribed facsimile copy of it was presented to the Foreign Member.

The simple, homely ceremony derived dignity and pathos from the heart-felt gratitude of the exiled psychologist to the Society which had done him honour.

ALBERT C. SEWARD

THE DEDICATION OF THE FRANKLIN INSTITUTE OF THE STATE OF PENNSYLVANIA IN HONOUR OF BENJAMIN FRANKLIN

In response to an invitation from the President and Board of Managers of the Franklin Institute, Philadelphia, the Royal Society appointed the Foreign Secretary as their delegate to attend the Dedication Ceremonies on 19, 20 and 21 May. The delegate presented a congratulatory address, a facsimile of the Charter Book, and a copy of the certificate signed by the Earl of Macclesfield and eight Fellows in favour of the election, without the usual payments, of Benjamin Franklin, which took place on 29 April 1756. When the addresses were presented to the President of the Institute the names of the institutions and delegates were called by the Secretary in the supposed or actual order of foundation of the universities, learned societies and other bodies, beginning with the University of Bologna: an unusual compliment was paid to the University of Cambridge which, according to the compiler of the list, was founded in 1257, nine years before Oxford! Delegates were not expected either to read their addresses or to make any verbal communication, but the representative of the Royal Society at his request was allowed to make brief reference to the three offerings entrusted to him.

Benjamin Franklin was awarded the Copley Medal in 1753, in recognition of his 'curious experiments and his observations in electricity,' three years before he became a Fellow. In a letter to the President and Council of the Society, dated 29 May 1754, Franklin wrote: 'I do not know whether any of the Fellows have attained the boasted art of multiplying gold; they have certainly discovered how to make gold infinitely more valuable.'

Franklin has been described as 'the real founder of American higher education.' When he was well established in his adopted town of Philadelphia he became increasingly disturbed by its lack of provision both for adequate defence and for the education of youth. He was moved in 1743 to circulate among leaders in the colony of Pennsylvania a proposal for the establishment of an academy, and this was effected in 1749: the academy in process of time became the University of Pennsylvania. On his return from France in 1785, where he had spent eight years as plenipotentiary, the Provost and professors presented him with an address containing these words: 'We feel a particular pleasure in paying our acknowledgments to the gentleman who first projected the liberal plan of the institution over which we have the honour to preside.' At an earlier date, when he was twenty-one years old, Franklin founded a sort of mutual improvement society, which he called the Junto. In 1743 he founded the American Philosophical Society and was its first secretary: this society soon ceased to function, but when in 1766 the Junto became the American Society for Promoting and Propagating Useful Knowledge, the Philosophical Society was revived and, after a short time, the two rival societies were united as the American Philosophical Society for Promoting Useful Knowledge. This society is the oldest of its kind in America: it is exceptionally rich in Franklin relics and possesses a very large collection of his letters and MSS.

The Franklin Institute is of later date: in 1823, when James Monroe was President of the United States, the new conditions imposed by the industrial revolution inspired Samuel V. Merrick, a young man of twenty-two, with a determination to provide a centre where mechanical training could be obtained. His first step was to invite a number of fellow-citizens to attend a meeting; but no one responded to the summons: a second attempt was equally unsuccessful. He then secured the active support of William H. Keating, a young professor of chemistry in the University, and a meeting was held at which a society was founded. On 3 March 1824 the Franklin Institute of the State of Pennsylvania for the promotion of the mechanic arts received its charter. It was natural to associate Franklin's name with an institution established for educational purposes and general usefulness. Day and evening classes were organized: a beginning was made with a library and a collection of models: a magazine was published, and in 1828 its title was changed to the *Journal of the Franklin Institute*; this is the oldest technical journal in the United States.

An important activity of the Institute was the publication of abstracts of specifications of patents, and for several years this was the only available source of information on new inventions. Examiners were appointed to report on all new and useful discoveries. One of the duties of the Committee on Science and the Arts during the last eighty years has been the selection of Franklin Institute medallists. The Institute inaugurated

many lines of research which were subsequently taken over by the Government. It is said that in 1874 a contribution to the exhibits at the Institute was ice cream soda, 'to the joy of American life.' In 1884 Lord Kelvin, Sir Oliver Lodge, Sir James Dewar, and Graham Bell attended the first International Electrical Exhibition organized by the Institute.

In 1918 Henry W. Bartol bequeathed his residual estate to the Institute for the foundation of a research laboratory in Physical Science. Ten years later the Bartol Research Foundation was transferred to the Campus of Swarthmore College, a few miles from Philadelphia: the present Director is Dr W. F. G. Swann. In 1935 the Biochemical Research Foundation, formerly the Cancer Research Laboratory, was affiliated to the Franklin Institute: it is under the direction of Dr Ellice McDonald with a scientific staff of about sixty.

In 1927, at a dinner of the Poor Richard Club—a club called after the famous Poor Richard's Almanack, which was one of Franklin's most successful ventures—a proposal was made to erect a national monument in honour of Benjamin Franklin, and as the Institute was in need of increased accommodation a joint appeal for funds was issued. A sum of 5,000,000 dollars was promised in twelve days by more than 11,000 subscribers, and on 18 January 1930, Mr Cyrus A. K. Curtis celebrated his eightieth birthday by digging the first sod on the site of the present Institute. The well-proportioned building, in a restrained and dignified classical style, stands on the Parkway, a large open space on the edge of the city: it includes the Fels Planetarium, a library and lecture rooms, a large and lofty rotunda containing Mr Fraser's heroic statue of Franklin, also a series of halls with exhibits, including about 4,000 'action exhibits.' Special prominence is appropriately given to the graphic arts and electrical appliances.

For more than a hundred years the Franklin Institute has been devoted to the increase of useful knowledge, to the encouragement of inventions and discovery, and to the education of the public in the achievements of Science and Industry. The President is Mr Philip C. Staples, President of the Bell Telephone Company; the Administrative Head is Dr Henry B. Allen, formerly chief metallurgist with Messrs. Henry Disston & Sons; Mr Benjamin Franklin is Treasurer; Dr James Barnes is Technical Adviser and has charge of the Physics Section. They have several colleagues concerned with other educational activities.

The Institute serves many purposes: its 'Wonderland of Science' and mechanical exhibits are on the lines of the Science Museum, London: it directs research and co-operates with similar institutions in the organization of astronomical and other expeditions. As a centre where lectures are given to large audiences, including Christmas lectures for young people, the Institute is comparable with the Royal Institution. A special feature is the extension of its appeal by means of travelling shows, particularly in chemistry and aviation, which visit schools, department stores, clubs, etc., in many other towns. There is also a musical section under the direction of Mr Guy Marriner of New Zealand, whose Sunday afternoon lectures attract large audiences. The Franklin Institute receives no financial assistance from taxation; its income is derived from small admission fees, members' subscriptions, endowments, and gifts.

THE DEDICATION

At dawn on 19 May the firing of guns on men-of-war in the Delaware river inaugurated the celebrations: this statement is made on the authority of the official programme. At 10 a.m. a new issue of orange-coloured half-cent stamps was on sale bearing a reproduction of the head of Franklin from the large statue in the Memorial Hall. In the afternoon the French Ambassador, Count René Doynel de Saint-Quentin, who was accorded a salute of nineteen guns on his arrival at the railway station and escorted by a troop of the Philadelphia City Cavalry, was the chief guest at the unveiling of Franklin's statue by the fifth great-granddaughter of Benjamin Franklin, Miss Louisa Johnston Castle. The statue in white marble, at least twice life-size, represents Franklin seated in an armchair, similar in design to the Lincoln statue at Washington. The sculptor, James Earle Fraser of New York, conceived Franklin as a man with an innate, burning curiosity; there is an alertness in the eyes and an inquisitive expression aided by the poise of the massive head. The sculptor has also successfully suggested a keen sense of humour: looking at the face one recalls Franklin's quotation of a French lady's remark: 'Il n'y a que moi qui a toujours raison.' The ambassador made a plea for French-Anglo-American friendship and co-operation, and a former United States senator, Mr George Wharton Pepper, officially welcomed Franklin, 'long a homeless genius in the city he adopted,' to his permanent home. A message from the President of the United States was read by the Hon. W. D. C. Roper, Secretary of Commerce.

In the evening the Poor Richard Club gave a dinner in the Franklin Memorial Hall at which Mr Roper was the chief speaker: he availed himself of the opportunity of giving advice to capital and labour. The dinner was not inconsistent with Franklin's dictum 'eat not to dullness, drink not to elevation.'

20 May was given up to a series of half-hour lectures, the first of which was an admirable treatment of 'Benjamin Franklin in St Andrews, 1759' by Sir James C. Irvine, Principal and Vice-Chancellor of the University which conferred an Honorary Degree upon Franklin. Readers of the Autobiography—'America's first best-seller'—will remember that Franklin spoke of his visit to Scotland as six weeks of the 'densest happiness' in his life. Among other lectures was one by Dr Louis Martin on 'L'hospitalisation des maladies contagieuses.' The Royal Society delegate had the privilege of being present, a solitary male, with his wife who was the guest of honour, at a luncheon given by the members of the Ladies' Acorn Club, and enjoyed the additional privilege of being requested by Miss Agnes Repplier, the well-known essayist, to say a few words.

In the afternoon of 20 May a reception was given to the French Ambassador by the French-American Association at the Barclay Hotel. In the evening delegates in academic over full evening dress assembled in the Franklin Hall where honorary degrees were conferred by Dr Thomas S. Gates, President of the University of Pennsylvania, and medals awarded by the President of the Franklin Institute: the recipient of the highest award, the Franklin medal, was Dr William F. Durand, Emeritus Professor of Stanford University. An impressive ceremony was the presentation by Colonel C. P. Franklin on behalf of the Sons of the Revolution to the President of

the Institute of a copy of the first flag used by independent America and designed, it is believed, by Franklin.

On 21 May more half-hour lectures were given on applied science. A banquet at the Bellevue Hotel concluded the three days' programme. The chief speakers were the Hon. Herbert C. Hoover, a former President of the United States, and the Hon. Roland S. Morris, President of the American Philosophical Society. It was pleasant to find that the menu was printed from Caslon type bought by Franklin in England. Mr Hoover's speech, with many humorous and thinly-veiled allusions to the New Deal, delighted the company of several hundred diners: he quoted many wise sayings of Benjamin Franklin, most of which he found unsuitable as texts for an after-dinner speech in the present political circumstances. He reminded his hearers that Franklin's name had been given to thousands of counties, cities, towns and streets; 'there have been twenty million orations delivered over him . . . Like most schoolboys of my day I delivered a speech on him once myself. That was the same year I delivered an oration on "Rome was not built in a day"; that was my last real oration.' Franklin, Mr Hoover said, seemed to be opposed to spending, but, he added, 'this is not a political meeting and I do not want to give even a hint of partisanship': Franklin 'knew none of the joys of planned economy.' The former President referred to Franklin's strong views on borrowing and debts as a theme 'that it was better not to pursue.' Franklin had much to do with creating the United States Senate: 'their investigation activities would be both surprising and disappointing to him.' After thoroughly enjoying himself in this happy vein Mr Hoover gave a delightful survey of Franklin's many-sided activities, his passion for education, his vision, and his wisdom. 'Benjamin Franklin,' he added, 'should be the patron saint of that altogether characteristic American, the self-made man.'

By far the greater number of the institutions enumerated in the official list were from the United States; only a very few of the European Universities and Societies were represented by non-resident Delegates. Dr Louis Martin represented the Institut de France, the Pasteur Institut and the Académie de Médecine; Sir James Irvine represented St Andrews University, the Royal Society of Edinburgh and the Chemical Society of London; Dr C. C. Paterson represented the Royal Institution and the Royal Society of Arts. In addition to the Royal Society, Sir Albert Seward represented the University of Glasgow, the British Association and the Geological Society of London.

The Dedication celebrations included naval and military displays, a parade of 'Young Philadelphia' and the presentation of awards for essays on 'What Franklin did for America and for us who live to-day.' A representative of a Philadelphia newspaper began an interview with the Royal Society's delegate with the question—'Would Benjamin Franklin, if he were alive to-day, disapprove the use to which science has been put in the manufacture of engines of war?' It is good to find that the views of the great British-American printer and diplomat, described by a French admirer as 'Socrates born again,' are still in demand.

Mr Frederick Watson, the British Consul-General in Philadelphia, contributed in no small degree to the comfort and enjoyment of the Society's Delegate: at his suggestion the Consul-General in New York, Sir Gerald Campbell, sent one of his staff to meet the *Normandie* and expedite the inspection of luggage by the Customs Officers: Mr Frederick

Watson was also most helpful during the celebrations. The Delegate and his wife were the guests of Mr and Mrs Charles Griffith, whose home in one of the older tree-planted streets of Philadelphia fully maintained the high standard of American hospitality and friendliness.

At the conclusion of the Dedication Celebrations the Society's delegate paid a visit to the National Academy of Sciences at Washington where he was welcomed by Mr Paul Brockett, the Secretary. The National Academy, with which the Royal Society has recently become more intimately associated through the foundation of the Pilgrim Trust lectureship, combines the functions of the Royal Society with the educational aims of the Royal Institution and the Science Museum. The Director of the Geological Survey, the Secretary of the Academy and other friends entertained the Delegate and his wife at luncheon at the Kosmos Club.

The programme of the Franklin Institute Celebrations, books, pamphlets, and newspaper cuttings have been deposited in the Library of the Royal Society.

ALBERT C. SEWARD

SOCIETAS SCIENTIARUM FENNICA

An important event of the present year has been the attainment of its centenary by the Societas Scientiarum Fennica, the Finnish equivalent of the Royal Society or the Académie des Sciences—though indeed of wider scope than these, including as it does a Humanistic section in addition to those concerned with Mathematics and Physical Sciences on the one hand and Natural History on the other.

The Society, during the century of its existence, has been responsible for a large output of scientific literature, its main publications being sub-divided, on very much the same plan as those of the Royal Society, into (1) Transactions (*Acta*), which of recent years (1930–38) have been arranged in separate volumes for the physico-mathematical and biological subjects; (2) Proceedings (*Ofversigt*), which from 1923 onwards are arranged in three parallel series of 'Commentationes' corresponding to the main sections of the Society's activities, and (3) an annual '*Arsbok*' containing general information, reports of lectures, and obituary notices. The pages of these several publications provide impressive testimony to the importance of the Societas Scientiarum Fennica in the march of modern science.

The centenary has been marked by the publication, in Volume X of the '*Commentationes Humanorum Litterarum*,' of a valuable history of the Society by the veteran Finnish botanist, Fredrik Elfving, whom some of the older Fellows of the Royal Society may remember as an honoured guest at the British Association meeting in Edinburgh in 1892. Elfving succeeded Tigerstedt as Secretary of the Society in 1923, to be succeeded in turn by the present Secretary, Professor Ernst Lindelof, to whom is due so much of the admirable organization which characterized the actual centenary celebrations throughout.

The volume contains an interesting and detailed history of the Society during the century of its existence, preceded by an account of the scientific activities in Finland which led up to its foundation in 1838. The interest and value of the historical narrative