



Spirits were set aflame

(The Bettmann Archive)

Franklin Anniversary

THE year 1956 marks the 250th anniversary of the birth of Benjamin Franklin, a self-taught man of letters who by inclination was a scientist and philosopher and by popular demand a statesman and diplomat. The Franklin Institute of Philadelphia has appropriately taken the lead in organizing this year-long tribute to Franklin and has developed a truly impressive commemorative program of special events in his memory. A host of other organizations and institutions, scientific and otherwise, in the United States and abroad have cooperated in celebrating the anniversary.

Among the several major occupations that filled Franklin's eighty-four years, his experiments in physics, which he did not begin in earnest until his life was half spent, provided many of his most personally satisfying moments. One finds him constantly hoping, in his later life, to be able to settle down quietly and devote the remainder of his years to his experimental studies; but inevitably his peaceful periods were cut short by urgent demands for his political services, and during his last thirty-five years the pressure of his public duties left him with no time for the practice of science.

He first became acquainted with the subject of electricity in 1746, the Library Company of Philadelphia (which Franklin founded) having received from Peter Collinson of London a glass tube suitable for frictional experiments, together with instructions for its use. For several months thereafter Franklin's attention and time were "totally engrossed" in a rapid series of observations which led him to the argument that electricity, rather than being simply a product of friction, existed

normally in a diffuse state from which it might be collected. A convenient collecting method resulted from his earliest experiments, which in part had to do with the ability of pointed conductors to draw electricity from charged bodies. While he was not alone in suggesting the identity of lightning and the spark of an electrical discharge, Franklin was the first to propose a clearly conceived experiment to settle the matter. His plan called for placing a spire, tipped with a pointed metal rod, on a tall building in Philadelphia in order to attract electricity from thunder clouds, but the Philadelphia tower was still unbuilt in May 1752, when the experiment was first performed successfully in France by others. During Philadelphia's first thunder storm in June of the same year, Franklin, with the help of his son, carried out the famous experiment in which he sailed a kite into the electrically charged clouds, using a kite string insulated at the hand by a length of silk ribbon. The rain-soaked twine proved an adequate conductor, sparks flew, a handy Leyden jar was discharged, and spirits were set aflame by the electrical fire.

For this and many other contributions to the advancement of science, Franklin was received warmly into the scientific community of his day and was elected to membership in the outstanding learned societies of the world. Although he was able to devote only a few of his years to the systematic conduct of experiments, Franklin's interest in the progress of science remained keen throughout his life and he may well be remembered by American scientists for the reflection in our traditions of his firm belief in the necessity of freedom in the realms of scientific inquiry and communication.

Atoms for Peace Agency

AGREEMENT on a charter for the proposed International Atomic Energy Agency was reached unanimously last month by a working group of delegates from twelve nations, including the US and the USSR. The draft statute, which defines the organizational structure and voting procedures of the agency, is to be submitted for consideration by representatives of eighty-four countries belonging to the United Nations or its specialized agencies at a conference to be held in September at UN headquarters in New York. If the charter receives the endorsement of the conference, it then must be ratified by at least eighteen governments before it can come into force. It is intended that the agency will be set up to function as a clearing house and depository for atomic materials and will be empowered to distribute materials from its pool to be used for peaceful purposes for the benefit of all. Agreement by the working group on the terms of the charter represents the first major step towards establishment of the agency, which was proposed by President Eisenhower in a speech before the UN in December 1953.