

of the research work undertaken by the British Committee of the International Electro-Technical Commission.

The new laboratory will have two main functions—to give instruction in existing knowledge concerning high voltage technology to engineering graduates, and to provide research facilities to extend existing knowledge on the same subject. In addition, the facilities of the laboratory will be available to research organizations for approved work, and it is hoped that advantage will be taken of this opportunity in the same way as the British Electrical and Allied Industries Research Association have utilized the resources of the college in the past.

The main laboratory has been constructed by removing from an existing building in the college a floor that divided it. Its main dimensions are 80 feet by 40 feet by 38 feet high, and the galleries of the original building now serve as excellent observation areas. In view of the layout of the laboratory, where five sources of very high voltage exist in various parts of the building, it has been necessary to provide a complete system of interlocked doors and screens so that, when once the occupants have vacated the danger area and the gates have been shut, no one can possibly enter it again without automatically cutting off the power. This has been achieved by means of electrical and mechanical interlocking devices arranged so as to permit the maximum use of each item of the equipment with the minimum of interference with the remainder of the laboratory.

Lectures on high voltage technology at the college will be supplemented by laboratory work.

FOUNDATION OF THE SMITHSONIAN INSTITUTION

AUGUST 10 is the ninetieth anniversary of the establishment of the Smithsonian Institution by Act of Congress on August 10, 1846, for "the increase and diffusion of knowledge among men."

"That date," says a statement issued from the Smithsonian Institution, "may be regarded as highly significant when considered from the viewpoint of nine decades later and of a world whose material life has been revolutionized by scientific research." The statement continues:

Few foresaw, even dimly, such an outcome in 1846. Pure science then was almost exclusively a hobby of individuals. Its pursuit was confined largely to gentlemen of means and leisure. In institutions of higher education it was far outranked by the so-called humanities.

Among those with at least a dim foreboding of the wonders ahead was an inconspicuous English scientist, who had died at Genoa in 1829. Before he died he concluded an act that was to immortalize him as one of the world's great benefactors of mankind. He incorporated in his will a clause leaving his entire fortune to the Gov-

ernment of the United States, in case his nephew died intestate, "to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men."

This gentleman was James Smithson, a natural son of the Duke of Northumberland. He was a student of chemistry and mineralogy whose early promise led to his election to the Royal Society of Great Britain shortly after his graduation from Oxford. The value of the estate that finally came to our National Government amounted to about \$550,000. With this was set up by far the largest institution, up to that time, devoted to the pursuit of pure science without regard to immediate and obvious utility.

Thus was the support of science placed on a new basis. Endowed research institutions, some of much greater wealth, have sprung up over Europe and America since then, with the rapid realization that the shortest road to progress is the discovery of the basic laws of nature and that this can best be done by adequately supported, coordinated programs of research.

The terms of the Smithson will, in the opinion of Dr. Charles G. Abbot, secretary of the Smithsonian Institution, are ideal for such a purpose. So rapid is the progress of science that a problem that may seem of supreme importance to-day is outmoded to-morrow, and funds left for its pursuit exclusively become involved in serious complications. "For the increase and diffusion of knowledge among men" allows plenty of leeway, regardless of the developments of the future. The words will be as applicable a thousand years hence as to-day. Smithson's own words were indeed prophetic: "The best blood of England flows in my veins; on my father's side I am a Northumberland, on my mother's I am related to kings, but this avails me not. *My name shall live in the memory of man when the titles of the Northumberlands and the Percys are extinct and forgotten.*"

REGIONAL STATIONS OF THE U. S. DEPARTMENT OF AGRICULTURE

THE Bankhead-Jones Act contains a provision for the establishment and operation of regional research laboratories by the Secretary of Agriculture. The *Experiment Station Record* reports that these laboratories are to be set up in the major agricultural regions, and under their jurisdiction research supplementing that otherwise provided for may be conducted "into laws and principles underlying basic problems of agriculture in its broadest aspects; research relating to the improvement of, the quality of, the development of new and improved methods of production of, distribution of and new and extended uses and markets for agricultural commodities and by-products and manufactures thereof; and research relating to the conservation, development and use of land and water resources for agricultural purposes."