

IN the issue of *SCIENCE* for September 14, Professor Elihu Thomson makes it quite clear that the celebration in Philadelphia last April (referred to in *SCIENCE* for April 13, May 25 and August 3) was neither in fact nor intent a celebration of the fiftieth anniversary of the *invention* of the dynamo, as had been reported. It was unfortunate that reports misled some of us into believing that this was its intent.

Professor Thomson also calls attention to various magneto-electric machines with permanent magnets, preceding the dynamo-electric machines (commonly referred to as dynamos) with electrically excited fields which were shown at the Centennial Exposition in 1876. Electrically excited fields made possible large machines capable of regulation, and their use was an important step in the development of the electrical art of to-day, an art in which Professor Thomson himself has always taken a leading part. The exhibit at the Centennial of the first dynamo-electric machines, two made in France and one in America, was, therefore, of historical importance. So also was the report published by the Franklin Institute two years later on the first scientific tests made on this type of machine. This report is noteworthy and deserving of commemoration.

FREDERICK BEDELL

QUOTATIONS

A MONUMENT TO MEDICINE

DR. SAMUEL W. LAMBERT, in his address at the dedication of the Medical Center, described this monumental group of tall buildings as "a veritable Tower of Babel"—in view of the variety of scientific languages to be spoken there. But with this the analogy ends. The ancient tower failed of completion because of the sudden confounding of tongues. But in this modern community of towers all that the art and the science of medicine have to offer, each in its own speech, is brought together into a unity. This promises to be perpetual, under one roof—a roof so high that, just as the ancients hoped the gods might visit mortals, the builders have made it possible for the heavens to touch mankind with healing.

No such monument has ever before risen to medicine as was dedicated on the western rim of Manhattan Island. Another will soon arise on the eastern rim. Together they will be a vast fortress of defense against disease, and on their towers scientific watchmen will stand not only to give warning but also to fight day and night against the swarming bacterial infections and toxins and heal the wounded. The people of this city and the surrounding region should long be grateful to Mr. Edward S. Harkness and his

mother because they kept this site through many years in prospect of such beneficent use, when the plans could be perfected and the funds found for this great enterprise, in which realization he had also a large part. It may be hard for those who have great riches to enter the Kingdom of Heaven, but this achievement demonstrates that it is not an impossibility. The vision of Mr. Harkness has literally brought into the midst of this greatest city a smaller city of refuge which is as one "let down from Heaven."

Its significance, as was again emphasized at the dedication, is that it is devoted to "the trinity of medicine": the care of the sick, research and teaching. This is not by any means unique, but never before have the three services been coordinated in one institution on such a scale and with such endowment and equipment. Even so, it is not as yet complete, and will not be till every specialty of medicine and surgery has not only its dispensary but also its wards for the care of patients, and until provision is also made for dormitories and a common dining-hall for the students of medicine. But what has been already secured is so vast and varied that those who have planned and labored through years must feel that their noble project has been brought to full fruition. The academic degrees bestowed upon them are but a handsel of the praise and gratitude that will be paid in for years to come, and should, in the phrase of Sir Thomas Browne, author of "*Religio Medici*," make them "happy enough to pity Caesar."—*The New York Times*.

SCIENTIFIC APPARATUS AND LABORATORY METHODS

FURTHER STUDIES IN QUANTITATIVE VIROLOGICAL METHODS

PRELIMINARY studies¹ on the virus of light-green mosaic of tobacco indicated that discrepancies in quantitative tests and variations in the initial concentration of virus in fresh extracts are caused by several factors. The relative importance of some of these factors is being determined.

Quantitative inoculation tests have been made in full and in reduced daylight and in artificial light. Such tests have also been carried out in full daylight at fairly high (77 to 85° F.) and low (55 to 60° F.) temperatures, representing extremes which might be encountered in greenhouses during the year.

The results indicate that the number of mosaic-infected plants which develop is influenced to a less

¹ H. H. McKinney, "Quantitative and Purification Methods in Virus Studies," *Jour. of Agr. Research*, 35: 13-38, 1927.