and a new computing room have been completed. The School of Electrical Engineering has also added modern equipment for demonstration and research, especially in the field of high-voltage transmission.

THE ANNUAL REPORT OF THE BROOKLYN BOTANIC GARDEN

THE twenty-eighth annual report of the Brooklyn Botanic Garden for the year 1938, just published, calls attention to the fact that during the past year citizens of Brooklyn contributed to the garden for current expenses and permanent improvements more than $54,000. This amount is 57 per cent. of the tax budget appropriation of the city for the support of the garden, and is in addition to private funds, income from endowment and other funds. The private funds budget of the garden was more than 56 per cent. of the total operating budget, the tax budget appropriation being approximately 44 per cent. The City of New York, therefore, derived more than two dollars' worth of return for every dollar appropriated to the Botanic Garden. The attendance at the garden was more than 1,628,000. The record attendance on May 1 of 56,145 was equivalent to 155 visitors every two minutes.

The report records 265 gifts of funds, plants, publications and other objects. The need of additional endowment is stressed by the director. This has become especially urgent since the income from permanent funds and contributions of private funds have fallen off so greatly since 1930, necessitating drastic reduction in the services which the garden renders to the public and to the advancement of science and education. Eighteen pages of the report are devoted to recording the results of scientific research on plant life done at the garden during 1938. These include studies in disease resistance in plants, on the iris and its diseases, on the classification of various groups of flowering plants, on variation in the ferns and studies of economic plants.

The extent to which the garden cooperates with the schools of New York City may be realized in part from the statement that during 1938 more than 150,000 pupils were assisted in their studies through material supplied by the garden, more than 925,000 packets of seed were supplied to school children and more than 24,000 pupils enjoyed plants raised in the garden and placed in schoolrooms.

Under the heading "Free Education," attention is called to the failure of the public to realize that all the so-called "free" educational and recreational privileges which they enjoy through the "free" museums, botanic gardens and other semi-public institutions of the city must be paid for by some one, and there is really no such thing as "free" education. Part of the cost is met by the taxpayers through the tax budget, and a substantial portion of it is met by private citizens who "in addition to their taxes make generous contributions for the support of our public educational institutions." It is pointed out that "it would be salutary if some way could be devised to make every one conscious of this fact who visits our museums, zoological parks and botanic gardens that are open 'free' every day in the year, and who attends their lectures and classes without payment of any fee. Such an opportunity costs money."

SYMPOSIUM ON THE CELL AND PROTOPLASM

DIRECTLY following the meeting of the Pacific Division of the American Association for the Advancement of Science at Stanford University, a symposium will be held in commemoration of the centenary of the cell and protoplasm, opening on June 30 and continuing through July 5.

Papers to be presented, one each forenoon, afternoon and evening, will recognize the comparable development of particulate concepts in both the biological and physical sciences since the beginning of the nineteenth century and will discuss, in view of this development and of its converging trends, some recent investigations in the fields represented. Accordingly both biologists and physicists have been invited to participate.

It is intended that the three papers scheduled for Wednesday, July 5, will link this symposium with the National Colloid Symposium, which convenes also at Stanford University on July 6.

The program of papers on the cell and protoplasm follows:

Friday evening, June 30. "Cell and Protoplasm Concepts: Historical Account," E. G. Conklin, Princeton University.

Saturday, July 1. "The Microdissection of Living Cells" (illustrated), Robert Chambers, New York University. "The Cell Wall and Protoplasm," L. H. Bailey, Harvard University. "Chromosomes and Cytoplasm in Protozoa," H. S. Jennings, the Johns Hopkins University.

Sunday, July 2. "Genes and Chromosomes," Richard Goldschmidt, University of California. "Cellular Differentiation and External Environment," C. M. Child, University of Chicago and Stanford University. "Cellular Differentiation and Internal Environment," R. G. Harrison, Yale University.

Monday, July 3. "Cell and Organism," C. A. Kofoid, University of California. "Chemical Aspects of Microorganisms," C. B. van Niel, Hopkins Marine Station. "Viruses," W. M. Stanley, Rockefeller Institute.

Tuesday, July 4. "Enzymes," H. Theorell, University of Stockholm. "Plant Hormones," F. W. Went, California Institute of Technology. "Vitamines," A. Szent-Györgyi, University of Szeged.

Wednesday, July 5. "Molecular Structure of Protoplasm," O. L. Sponsler, University of California at Los