by 49 feet wide, with semi-octagonal projections on each end. The material used is Credit Valley limestone, with Queenston stone trimmings, both obtained in Ontario. It will have two stories and a basement. On the roof will be three domes, those at the ends being 21 feet, that at the center being 25 feet in diameter. In one of the smaller domes there will be a 19-inch reflector (with pyrex mirror), which was constructed in the university workshops; in the other there will be a battery of cameras on a single mounting. The chief parts for these cameras are already on hand and the mounting will be made in the observatory workshop. In the central dome there will be a ten-inch refractor, which will be used for the observation of planets, comets, occultations and double stars, and it will also be available for public purposes. The domes are almost ready and the Administration Building will be completed next spring.

The observatory site is in the midst of a 179-aere plot of farmland, which will be made into a park to be known as the David Dunlap Park. It will be developed by the faculty of forestry of the university, and in the coming years will produce results of scientific value as well as being a pleasant resort for the people.

C. A. CHANT

## NEW BUILDING FOR ENTOMOLOGY AT THE UNIVERSITY OF CALIFORNIA

THE new building for the Divisions of Entomology and Beneficial Insect Investigations of the Southern Branch of the College of Agriculture of the University of California is now open. The building is two stories in height, with basement and attic greenhouse.

In the basement is a spray application laboratory, with a garage entrance where spray outfits or trucks may enter, fumigation tent room, carpenter and mechanics shop, storage rooms, machinery and refrigeration rooms, and a large room containing the controlled environment equipment. This equipment consists of six independent cabinets where the temperature may be maintained within 1 degree and including a range of 30 degrees to 120 degrees Fahrenheit, with the full range of humidity at any given temperature. One of these cabinets is equipped with thermo-timecontrol where any fluctuating temperature is automatically controlled within a 24-hour period. The light may vary from complete darkness to 1,000 watts. The air surrounding these chambers is taken in from the outside and oil filtered, and when necessary, conditioned within a limited range so far as temperature and moisture are concerned.

On the main floor is the spray laboratory, insecticide laboratory and insect physiology laboratory, aside from the usual laboratories and offices, dark room and photographic room. On this floor is also the fumigation room, equipped with a duplex 100

cubic foot vacuum fumigator, and two other fumigating rooms. In one of these rooms, as well as in the vacuum fumigators, the temperature may be controlled between 30 degrees and 120 degrees Fahrenheit, as well as the humidity. This installation is equipped with special apparatus for the use of cyanide, carbon bisulphide, carbon dioxide, ethylene oxide, formaldehyde and other fumigants.

The second floor is occupied by the Division of Beneficial Insect Investigations and consists of a series of laboratories and offices, taxonomic laboratory and graduate student and seminar room.

The attic greenhouse for growing plants and the propagation of insects is connected with an electric elevator, enabling plants to be brought from the greenhouse to the fumigating chambers or to the controlled environment room in the basement.

## THE JUNIOR SCIENCE CLUBS SECTION OF THE AMERICAN INSTITUTE

The formation of a new organization, known as the Junior Science Clubs Section of the American Institute, was announced following a meeting of a committee of teachers of science in the schools of New York City held on September 22 at the headquarters of the American Institute.

According to a statement made by Dr. Morris Meister, head of the science department of the New York Teacher Training College, who is chairman of the Plan Committee, the plan has been approved by the Board of Education, the Standing Committee of Science Teachers of New York City and other educational and scientific bodies. Its membership will consist of the junior science clubs. Under the guidance of the American Institute, it will offer to the members of these clubs larger opportunities in the field of science than they have heretofore been able to enjoy.

The plans call for a series of afternoon demonstration lectures, conducted by the science clubs in their own school auditoriums with the help and guidance of men of science. In addition, there will be evening demonstration lectures by well-known scientific men, visits to near-by industrial plants, research laboratories and observatories, and field trips for students of geology and other natural sciences. A special feature is the American Institute's Children's Science Fair, which is held annually at the American Museum of Natural History and consists of science exhibits prepared by school children. Arrangements have also been made for inter-club round table discussions, a Junior Science Clubs Congress and a publication to be sent to all member clubs.

L. W. Hutchins, director of the institute, called attention to the fact that it has been the meeting place of scientific men and laymen for over a hundred years. Now, because of the great interest shown by school