each containing 5 mg of tubercle bacilli. Each tube contains thirty doses, which, at the rate of three doses by mouth daily, suffice for ten days' treatment. One entire story of the building is reserved for these operations, this story being completely separated from the other parts of the building, in which are the laboratories of Messieurs Nêgre, Valtis and Boquet, the laboratories for the preparation of tuberculin, the anatomic laboratories, the laboratories for experimental physiology, chemistry and others. A *bacillothèque* (filing cabinet) contains all the strains of bacilli—human, bovine, avian and the like. The B C G strain is kept in a special bath, of which only Mr. Guérin has the key. In other cabinets are filed the records pertaining to each request for vaccine, together with the responses announcing the results secured, so that absolutely correct statistics are readily available. In the basement are the necropsy rooms and the cages for 6,000 animals (chiefly guinea-pigs) used for experiments. The Pasteur Institute uses 8,000 guinea-pigs annually.

THE X-RAY UNIT OF THE HOSPITAL OF THE UNIVERSITY OF MICHIGAN

AFTER four months of remodeling and installing new equipment, the University of Michigan Hospital, which now handles a volume of x-ray work second only to the Mayo Clinic in Minnesota, opened recently its new x-ray department, which is said to be unexcelled by any similar installation in the country.

The new unit is featured by a novel plan of rooms and apparatus which stresses convenience and privacy for patients and the quick processing of the x-ray films. From waiting rooms the patients are directed to private dressing rooms from which they pass as called by private corridors to the proper department. A complete "traffic system" of lights, which indicate what rooms are in use to all offices of physicians and the directing staff, makes possible quick routing of patients, so that routine x-ray examinations may be made at the rate of twenty an hour.

Rapid development of films to aid physicians to make an early diagnosis is made possible by a modern dark room, provided with dry air from which all moisture has been chilled out by special refrigerating machinery. Once in operation for the day, the room need never be lighted or work stopped, the completed films being passed out through a double-doored, light-tight well for final rinsing and drying From the drying rack they may be taken directly to the physicians' offices, each of which has its own viewing apparatus, so that a report may be given in a fraction of the usual time needed.

Among other details of the equipment are lead lined rooms which confine the rays of high voltage treatment apparatus, with lead glass windows through which the doctor or technician may observe the patient, a room in which x-ray films of the chest of bed-ridden patients may be taken through the bed by apparatus beneath the floor, special equipment for locating foreign bodies in the eye, and automatic apparatus, which, as soon as one patient's films are made, resets itself for the second stereoscopic exposing. Memorializing Dr. Preston M. Hickey, for many years head of the department, is a staff library which will contain publications on roentgenology, given by Dr. Hickey's friends, former associates and assistants, and a complete set of special x-ray studies of normal and diseased parts for reference. Classrooms, and research laboratories for medical students are also provided within the department. The memorial bas-relief of Dr. Hickey, presented this last year by the American Roentgen Ray Society, has been hung in the special conference room set aside for the members of the hospital staff who wish to review the examination of their patients with members of the roentgenology staff.

EXHIBIT OF THE PHILADELPHIA MINERALOGICAL SOCIETY

THE annual exhibit of the Philadelphia Mineralogical Society opened on April 17 in the Free Natural History Museum of the Academy of Natural Sciences. All the specimens are shown by members of a group of amateur mineralogists whose hobby is collecting minerals in near-by quarries, mines, valleys and hills, or wherever rocks are exposed.

The exhibit this year, which will be open free to the public until April 25, is confined entirely to minerals collected within a day's journey of Philadelphia in Pennsylvania and New Jersey—most of them rare and unusual crystals incidental to the mining and quarrying industry. For the granites, gneisses and other metamorphic rocks of the neighborhood frequently contain veins of interesting minerals. Over 100 minerals, or nearly ten per cent. of all those known to science, have been found within the city limits of Philadelphia.

Two groups of quartz crystals from Bridgeport, Pennsylvania, are exhibited by Mr. A. Fleming, Jr., and calcite crystals from Howellville, by Mr. E. H. Ceinkowski. Showy blue cyanite and garnet from Prospect Park, Delaware County, is exhibited by Mr. C. H. Jackson. A rather extensive series of local minerals is shown by Mr. Harry W. Trudell, director of the Frankford Institute for Medical Research, whose collection is perhaps the finest private one in Philadelphia.

The rock crystal and crystal ball are exhibited by Mr. Morrell G. Biernbaum. Petrified wood from Lindenwold, N. J., and Newton, in Bucks County, have