

a controlling valve to which is attached a numbered brass tag. By consulting a chart which is suspended near by, the engineer can shut the water off from any portion of the building at will.

In the rubbing rooms, marble tables are installed suitable for both dry massage and shampoo work. In this section of the building there is also located a drying room, containing a sterilizer for sterilizing the bathing suits, and a specially designed dryer for drying them. On the upper floors are located several very completely equipped bath-rooms for the use of the professors and staff.

#### HEATING EQUIPMENT.

Direct heating of the building is accomplished by means of steam radiators operating on a vacuum system. The steam supply to the building is brought from the University central heating plant to the Hart House mechanical room in both high and low pressure mains. The low pressure main is connected directly to the header supplying the heating system, which is located in the mechanical room. The high pressure main is also connected into the heating system through a regulating valve which ensures a constant supply at all times. Each section of the building, as well as the various indirect heating units in connection with the ventilation system, is supplied by a separate main direct from the mechanical room where it is fitted with a controlling valve, and by which means the steam supply to any part of the building may be regulated at will. The condensation from all radiators and coils is drawn back to the mechanical room by means of motor driven vacuum pumps from which it is discharged to a receiving tank located near the ceiling. Here the air is separated from the condensate, and vented off to the atmosphere, the condensate itself passing by gravity through a recording meter directly into a second receiver. This receiver is connected to a duplex unit of motor driven centrifugal pumps, which is controlled by a float switch in the lower receiving tank. When the water level in the tank rises to a given height the pump is set in operation discharging the water of condensation back into the main return line leading to the power house.

No pipes are exposed in any part of the building; the steam mains which run in the basement are all located in concrete tunnels with openings at fixed intervals to give access to the various drip traps, etc. The temperature of the mechan-

ical room is kept down and the appearance improved by a thorough system of pipe insulation. All high pressure steam mains are covered with magnesia covering and all low pressure mains here and throughout the building with asbestos covering in canvas with brass bands at regular intervals. All hot water heaters and storage tanks are similarly treated, and their neat white appearance lends an attractive touch to the whole installation.



THEATRE FOYER.

#### VACUUM CLEANING SYSTEM.

The ease with which the building is cleaned and maintained in that condition is due to the highly efficient vacuum cleaning equipment which is installed. The vacuum producer, which is located in the mechanical room, operates on the turbine principle, and is equipped with a separate tank which acts as a dust receptacle. A system of piping extends throughout the building, with outlets located near the floor level in sufficient numbers that every portion of the building may be reached with the hose equipment furnished for each floor. It altogether represents a most complete installation in which every detail of the system has been carefully worked out.