

# The Physical Education Building at the University of Rochester,<sup>1</sup> Rochester, New York

## Part I

THE decision of the Board of Trustees of the University of Rochester to move the College for Men to a new site brought about an intensive study of the requirements of the various departments. This study included the Department of Physical Education and after considering its needs, the University Building Committee requested the head of this department, Dr. Edwin Fauver, together with the architects, Gordon and Kaelber, to carry on such research work and to visit such institutions as was deemed desirable. This was done and considerable data were collected, after which Dr. Fauver presented the requirements of his department to the Building Committee, which authorized the preparation of final plans during June, 1928.

This building is composed of four major units, viz. a gymnasium, natatorium, basket ball court, and base ball cage. It is located in close proximity of the athletic field, grand stand, tennis courts and other recreational facilities.

The approximate over-all sizes are 256'-0" x 284'-0", separate public entrance having been provided for the gymnasium and basketball arena.

The construction of the building is fire-resisting, structural steel and reinforced concrete having been used throughout with the exception of roofs over the before-mentioned basketball court and cage.

The exterior is of Harvard brick trimmed with lime stone; granite is used for steps at entrances, and roofs generally are covered with slate, while windows are either steel or bronze depending on their locations.

### *Gymnasium:*

The first floor of the gymnasium portion of the building is devoted to locker rooms, with a capacity of more than 1100 lockers, in addition to showers, toilets, towelng rooms, etc. Adjacent to the main entrance are the administration offices, such as rooms for the Director and Assistant Director, examination, clinic and laboratory,

<sup>1</sup> The Society of Directors of Physical Education in Colleges maintains a standing committee on Gymnasium Construction and Material Equipment of which Professor A. I. Prettyman, Hamilton College, Clinton, New York, is Chairman. This committee is responsible for this discussion of the plans of the gymnasium at the University of Rochester. Correspondence relative to gymnasium construction is invited.

A depository for gymnasium plans is maintained at the Library of Hamilton College. The plans of the gymnasium at the University of Rochester and many other institutions are on view to authorized representatives of organizations interested in gymnasium construction.

Athletic Association Offices and waiting room for the public. Walls generally are of salt glazed brick while floors are of concrete, except in showers, toilets and drying rooms where white vitreous tile is used. In offices the concrete is covered with mastic tile of colors harmonizing with wall surfaces. Below these locker rooms is the fan room which provides the necessary air changes.

The main floor is reached from the main entrance by a broad Travertine stairs which leads to a large foyer in front of the gymnasium.

This foyer affords sufficient space for circulation and access to public toilets, retiring rooms, etc. and is finished in light colored brick and terrazzo floor with recesses for trophy cases and seats.

The gymnasium proper is a room 87x85 feet in size, exclusive of instructor's office, with storage space for equipment at one side. The wall surfaces are salt glazed brick to a height of 7 feet, with light colored brick above, Durolithic mastic having been used for flooring. The entire room is well lighted by high windows and large sawtooth skylights.

The glass in windows and skylights is a lens-prism glass transmitting properly diffused light. At the north side of the gymnasium unit are located the five squash and handball courts accessible from both gymnasium and locker rooms.

These courts are 18 feet 6 inches wide and 32 feet long, the standard size adopted by the United States Squash Racquet Association. The floors and front walls are of maple while side and rear walls are constructed of yellow pine, the usual metal telltale being removable so courts may be used for handball. At the rear of these courts are spectators' galleries with stairs at each end of corridor.

#### *Natatorium:*

The Natatorium is located at the southwest corner of the physical education building so as to obtain the maximum amount of sunlight.

Here the windows and doors are of bronze to withstand the high humidity.

The pool, which is 75 feet long and 30 feet wide, is lined throughout with tile, scum gutters being provided at sides, and tiled recessed ladders are placed at opposite corners while dark colored tile strips indicate the swimming lanes. The floors around the pool are buff colored tile, harmonizing in color with the salt glazed and cream colored brick walls.

To reduce the resonancy of the room the underside of the concrete roof and beams projecting below same are covered with cork, in this manner combining insulation and sound absorption. This cork is covered with aluminum paint.

In addition to the pool, the natatorium has a spectators' seating

deck, with a capacity of approximately 450 seats exclusive of balcony. These seats are of concrete painted, and those near the pool are protected from splashing by a solid rail. Below the before-mentioned seating deck are the heaters, pumps, filters, room for chlorinator equipment, transformer room and switchboard room. The heaters have a capacity of 14,000 gallons per hour while the water purifying equipment consists of a Wallace and Tiernan manual control solution feed chlorinator. There is also space for future laundry and a passage around the entire pool for the purpose of inspection.

Students are compelled to pass through a foot bath when entering the natatorium, the swimming instructor's office being located at the side of this entrance.

#### *Basketball Court:*

This part of the building has separate entrance for the public. The court, which is 71 feet by 94 feet, 6 inches, is of Durolithic mastic laid over concrete floor, which in turn rests on the ground. Again ample room is provided for spectators; a sloping seating deck having been constructed at three sides of the court. This deck is of fireproof construction except the wooden seats, and has a capacity of approximately 1,950 seats. The floor area is large enough to allow for two practice courts placed crosswise while the court for competitive games runs lengthwise which permits of the installation of removable bleacher seats that increase the capacity by about 500. The large entrance lobby, where ticket and telephone booths are found, leads to a wide concourse from which access is obtained to the seating deck. From this concourse one may also reach the check rooms and public toilets which are located on both sides at lower levels. The before-mentioned lobby has a quarry tile floor and brick walls similar to those used in the Natatorium. Connection between the basketball court and the students' locker rooms is found at the concourse level. While competitive games are played largely in the evening, there is sufficient daylight from exterior windows and depressed bays.

The steel construction is exposed, trusses supporting wooden insulated roof. The interior of the basketball court is smooth tile painted, the over-all dimensions of the room being approximately 112 feet by 139 feet.

The playing space is equipped with wall drinking fountains and wall cuspidors for use of the players.

Over the lobby are located the rooms for both home and visiting teams, each having its own showers and toilets. Stairs from these rooms bring players directly into the court. Large unit heaters supplement the wall radiation and fans provide for the circulation of air.

*Baseball Cage:*

The size of the baseball cage is approximately 138 feet by 153 feet, with a clear height of 28 feet under the steel trusses. The floor is a dirt floor composed of sand, silt and screened clay. Space for jumping pits and pole vaulting is provided at one end. A cinder running track, 12 feet wide, is located on three sides of the cage and extends under the basketball arena covering approximately seven laps to the mile. Four large unit heaters similar to those in the basketball courts are found at the corners. Exterior windows and depressed bays glazed with pressed lens glass give an abundance of light. Large exterior doors permit access for mechanical rollers to keep both track and dirt floor in condition. Here again walls are lined on inside with painted tile and overhead electric lighting makes this particular unit of the physical education building useable for night work.

The total cubic contents of the building are 2,465,300 cu. ft., built at a cost of approximately 29 cents per cu. ft.

## Part II

### Comments on the Physical Education Plant at the University of Rochester after Six Months of Use

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The Physical Education plant at the University of Rochester was completed in the fall of 1930. In a study of this plant several facts should be kept in mind. First, it is an entirely new plant being one of a group of buildings erected on a new site for the Men's College of the University of Rochester. Second, it was planned to meet the needs of a well developed system of Physical Education. Third, it is to serve a group of about seven hundred men, which may soon be increased to a thousand. Fourth, it was necessary to limit certain dimensions in construction because of the funds that were available. Fifth, the compactness of the plant is also worthy of notice.

The system of Physical Education which had been developed and had been in operation for many years at the University so far as the physical activity is concerned provided for three different divisions. First, the required work; second, the intramural program; and third, intercollegiate athletics. In general the classes for the required work in Physical Education are held during the morning hours. The intercollegiate and intramural competition occurs in the late afternoon. Many years ago the old formal floor and apparatus work in the class periods was discontinued and there was substituted a program of physical activities, and instruction in handball, squash, wrestling, boxing, swimming, volleyball, basketball, and track, dur-

ing the indoor season, and soccer, speedball, basketball, football, track, and tennis for the outdoor season. Furthermore this program provided for the division of the class sections into small groups which rotate through all the activities under the leadership of one of the staff, so that each group gets definite instruction in many plays and recreation.

The building was planned with this program definitely in mind, and provides ample facilities at the present time for all these activities.

The building was planned also to take care of a rather comprehensive intramural program. It provides space for four simultaneous basketball or volleyball games, ample facilities for indoor track and field activities, swimming, wrestling, handball, and squash.

For intercollegiate athletics there are excellent facilities. Provisions are made for all track and field activities, spring baseball practice, and for football in stormy weather and late afternoons when lights would be required for outdoor work. Varsity basketball is provided for in a court with two thousand seats, and space for 500 temporary ones. The Field House also affords space for a golf driving net, archery, and horseshoes.

Inasmuch as Rochester has a centralized department, i.e., required Physical Education, Intercollegiate Athletics, and Student Health, in one department, the plant was built to provide for ample office space, examining rooms, and laboratory for the staff. The provision for a room in which gas ranges and heaters can be installed has made it possible, with a minimum of confusion, to serve a banquet for seven hundred people.

The plant has been in operation about six months and in general has met, to a very high degree, all demands made upon it. There are several features about which comments should be made. First, the arrangement for intercollegiate basketball is very unusual. This arrangement makes available a second gymnasium floor at all times except in the late afternoon, when it is in use by the varsity team. It eliminates the necessity of frequently moving in and out temporary seats, or installing them on the basketball court for the season, which would limit the playing floor to one court during the winter months when space is at a premium. The arrangement for dressing rooms is excellent, and makes it possible to keep the rest of the plant locked during varsity contests. Ample space is also provided for checking facilities. Second, the inclusion of five hundred cement seats in the natatorium has made it possible to keep the pool more sanitary since all spectators are kept in these seats.

The initial request for fifteen handball courts and squash courts instead of six would have much better met our needs because the courts are already over-crowded. A movable telltale has been made

which can be removed or placed in position in a fraction of a minute when it is desirable to convert the courts from handball to squash or vice versa. The natural ventilation of these courts is excellent, and the gallery is exceedingly worth while for instruction purposes as well as for spectators.

The baseball area would be somewhat more serviceable if the dimensions could have been increased ten or fifteen feet in each direction. Also the gymnasium floor would be more effective if it were ten feet longer. This condition was anticipated but funds were not available to provide for the increase in dimensions. The stairway on the gymnasium floor should have been eliminated entirely. Also the two side doors leading from the vestibule on to the floor should have been eliminated and the center door should have been a double one.

In a study of the facilities of the Physical Education plant one should keep in mind that the grandstand with a capacity of six thousand seats is located only a hundred feet distant and has provided for dressing rooms for varsity and visiting teams. If this space were not available, additional dressing rooms would be needed in the gymnasium. As it now works out, the dirt and confusion that goes with dressing rooms in the gymnasium is eliminated, and is transferred to a more convenient place, the stand adjacent to the competitive field.

Aside from these criticisms we have found in the use of the building for six months that it is very adequate to take care of the physical needs of 600 to 1000 students.









