CLEVELAND'S NEW UNION DEPOT

By William Faber, '27

P. and M. J. Van Sweringen, the owners of the Nickle Plate Railroad, are building for the people of Cleveland, what promises to be the finest railroad station in the world. This depot, which is to cost $60,000,000, will be strategically located on the public square, in the center of the busy fifth city. It will be surmounted by a 50-story tower which will serve as a landmark for all the surrounding country.

Graham, Anderson, Probst and White, the designers of the recently completed Chicago Union Depot, are the architects. Their design calls for a central tower, seven hundred and eight feet in height, facing the southwest corner of the public square, and two supporting wings along the west and south sides of the square, making a V-shaped building with the tower at the vertex. The west wing which consists of the Hotel Cleveland, has been completed and the foundations are being constructed for the tower.

The tower will be the second tallest in the United States, but unlike the Woolworth Building,—the only one which exceeds it in height, this tower will be more conspicuous for it is alone among buildings, all of which are less than half its height, instead of being placed among equals like the Singer and Equitable Towers.

The tower is the most individual architectural feature of the depot. Its shape will be square to the thirty-seventh floor, where it changes to circular with buttresses to the thirty-ninth floor, and finally terminates in a cone at the top. The forty-seventh floor is adapted for use as an observatory, affording a wide view of Cleveland and the surrounding country. Twenty elevators will serve this portion of the building.

The wing on the south side of the square will be similar in height and appearance to the Hotel Cleveland and will be used as an office building. White or light gray stone will be used in finishing the exterior of the building.

The station group proper will spread in a fan shape, south and west and eventually cover a large area with terminal structures of the type that have spread out along the right of way from the Grand Central in New York.

The engineering problems, other than those encountered in building the tower which will be described later, involve practically a complete rebuilding of Cleveland's famous Flats district. Miles of track will have to be regrouped and relaid; bridges will have to be built that will clear the tallest vessel masts; the Cuyahoga River must be straightened and millions of dollars worth of property must be condemned.

The interior will represent the last word in convenience for the man who takes a train in Cleveland. He will find that everything possible has been done to save him time and steps. He has a choice of five entrances, if on foot; while his taxicab will take him to a special entrance. If he enters through the Public Square entrance, he will walk down an easy ramp into the station concourse where the first thing he will observe will be the information booths. A little farther on he will find the ticket windows; beyond these, the baggage rooms, checking rooms, waiting rooms and stairways to the train levels.

Coming in from the trains there will be no cumbersome trundling up and down the platforms with baggage. All baggage comes up by elevators and the incoming passengers find their baggage room at hand as they emerge from the concourse level.

Direct cognizance has been taken of the traffic situation for the plans call for the relocation of two important highways, each one hundred feet wide, across the station property, to provide a traffic bypass around the Public

Architect's Model of Cleveland's $60,000,000 Union Depot
Square, which will more than balance any increased congestion due to the location of the depot at the busiest point in the city.

It is expected that every steam railroad with the exception of the Pennsylvania will eventually run their trains into the depot. With this plan in view as a beginning, six island platforms will be erected serving thirteen tracks, with sufficient space allowed for future increases in traffic. Rapid transit will also be cared for on the same level, with individual platforms, by ten tracks to the north of the steam railroad tracks.

The actual construction work on the new depot has begun and at the rate it is progressing the depot should be ready for use by 1930.

The contract has been let on the foundation job to Spencer, White and Prentiss Company of Detroit, for the sinking of fifty-five caissons; sixteen of which will be laid to bedrock two hundred feet below the surface. The expenditure for this purpose will amount to about $500,000. This method is being used for the first time in Cleveland, though it has been employed on practically all the tall buildings of New York and Chicago.

The engineers of the Cleveland Union Terminal Company are now reviewing bids for the construction of the tower, but have not yet let the contracts.

The excavation work on the depot and part of the retaining walls have been practically completed. These retaining walls are among the largest in the world, and the completed portion is 316 ft. long by 50 ft. high.

Application has been filed with the war department by the Terminals Company for a permit for construction of a terminal bridge which is to span a two hundred foot channel of the Cuyahoga River. The bridge will be constructed at a height of ninety-five feet above mean lake level and will be an integral part of the terminal viaduct stretching westward two-thirds of a mile across the valley and carrying the west approach tracks over the Flats district into the depot proper.

Hand in hand with the main development, engineers have been preparing the west approach some two miles west at W. 25th Street, where a bridge three hundred feet long and eighty-two feet wide has been completed and put into operation for street car and vehicular traffic over the proposed right of way where eventually there will be eight steam and rapid transit tracks.

When the depot is completed Cleveland can justly be proud for it will not have a peer any place in the world and the long years of waiting will have brought a proper reward.

The Value of a Technical High School Education to an Engineering Student.