## NEW UNION PASSENGER STATION AT DAYTON, O.

The city of Dayton, O., has a very attractive appearance, resulting from its handsome buildings; its wide, clean and well-paved streets, and a general air of good municipal management. The new union station is in keeping with the general character of the city, and is exceptionally successful in

wide, are the baggage and express rooms, engine and boller rooms, coal storage and carpenter's shop. All these have concrete floors. The current for electric lighting is furnished by two Bullock dynamos, each directly connected to a Buckeye high-speed horizontal engine. Steam for the engines and for the heating system is supplied by a battery of two Stirling water-tube boilers. All



FIG. 3. VIEW OF UNION STATION, DAYTON, O.

its design, both in regard to its architectural treatment and to its provision for the comfort and convenience of the traveling public.

The station is owned by the Dayton Union R. R. Co., which is in turn owned jointly by the Cincinnati, Hamilton & Dayton Ry., the Cleveland, Cincinnati, Chicago & St. Louis Ry., and the Pittsburg, Cincinnati, Chicago & St. Louis Ry. The trains of all these roads, together with those of the Erie Ry. and the Dayton & Union Ry., use the station. The Dayton & Union Ry. is a small road. only 47 miles in length, belonging to the C., H. & D. Ry. and the C., C., C. & St. L. Ry. jointly.

From the general plan, Fig. 1, it will be seen that there are six through tracks, arranged in pairs, the tracks of each pair being 12 ft. c. to c. Between the tracks are concrete platforms 15 ft. wide and 700 ft. to 1,000 ft. long, connected by a crosswalk. This walk is kept open at all times, trains in each direction being stopped only after their rear cars have cleared the crossing. There is also a stub track for the trains of the Dayton & Union R. R., as this is their terminal, and the arrangement keeps the through tracks clear. Beyond the outer platform are two through freight tracks, and beyond these are the freight yard tracks. The platforms are covered by umbrella roofs, supported by center columns and light steel trusses, as shown in Fig. 2, the hollow cast-iron columns serving as down spouts. A wider roof covers the crosswalk connecting the platforms, and has at its outer end a telegraph and dispatcher's office.

The station has two buildings, separated by a passageway 56 ft. wide, in line with the ticket gates and the street where the omnibuses and carriages stop. The main building is 215 ft. 4 ins. long and 53 ft. 9 ins. wide. It contains the general waiting room (with ticket office, etc.).41 × 110 ft.; women's room, 20 × 25 ft.; women's tollet room, 12 × 18 ft.; men's tollet room, 17 × 16½ ft.; smoking room, 15 × 24 ft.; dining room, 18 × 20 ft.; and lunch room, 32 × 24 ft. The waiting room is very lofty, and has a vaulted ceiling. The west end of the building has an upper story, in which are the offices of the Superintendent and of the Dayton Union R. R. Co. The east end has also an upper story, in which are the kitchen and the trainmen's waiting room. In the other building, 260 ft. 10 ins. long and 45 ft.

heating pipes, electric wires, etc., are laid in a subway or pipe duct, as shown by the cross-section. The water supply is obtained from the city system, and being of too hard a quality to be satisfactory for boiler use, it is treated by a purification plant on the We-Fu-Go system. Coal cars run. directly into the coal room on a spur

architecturally accentuate the entrance to the station grounds, the architect designed a species of colonnade, or what is technically termed a propylon, which is erected on the building line of the street. This consists of groups of stone pillars and arches, supporting a flat stone ceiling, with pediments over the sidewalk entrances, and having a red tile roof. It spans the two sidewalks and the two driveways, the latter being separated by a raised part, level with the sidewalks, on which is placed a fountain presented by the city. This arrangement separates the lines of vehicles entering and leaving the station. This architectural feature cost about \$10,000, and while it is not a necessity from a utilitarian point of view, the railways are to be commended for their liberality in spending this amount to erect what is an important feature in the successful artistic design of the station as a whole. Just inside the propylon is a small grass plot. Fig. 3 is a general view of the station, showing the main building and the propylon, and also the umbrella roofs over the platform, and the smokestack of the boiler house. The tracks cross the street on the level, and a watchman is stationed here to operate the gates and to stop persons from going onto the platforms from the street.

From the street sidewalk, two cement walks lead up to the station: the one nearest the tracks being a broad walk extending along the front of the building and shut off from the tracks by a high iron fence. This is covered by a shelter roof. and provided with seats placed against the fence. so that in warm weather it forms a pleasant outdoor shelter for waiting passengers, without interfering with persons going to and from the station. At first there was the usual trouble of having the walk bespattered with unseemly expectorations. but this trouble was tackled in earnest by the superintendent for the sake of appearance as well as for sanitary reasons. There is no city ordinance against expectoration in the streets, but by the use of numerous cuspidors and warning signs the trouble has been greatly abated, while persons who heedlessly offend are politely admonished by the attendants and requested not to forget what the cuspidors are for.

Gates are provided in the fence, through which passengers are admitted to the train platforms

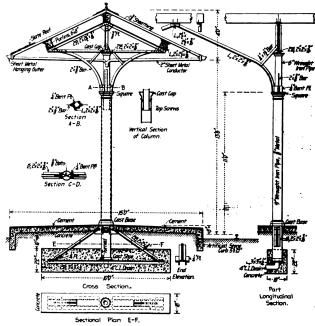


FIG. 2. CONCRETE PLATFORM AND UMBRELLA ROOF OF UNION STATION AT DAYTON, O.

track, the coal being shoveled out. Ashes are stored on the other side of the track, and shoveled thence directly into a car.

The station building is set back some little distance from the main street (Ludlow St.), and presents its narrow end to the street. In order to

only when their particular trains are ready. Passengers arriving by the trains pass directly out of the station by the covered way between the two buildings. Here also cabs and hotel omnibuses receive and deliver their passengers, convenient to the baggage room. During the winter, a portable



wooden wall or curtain, provided with doors, is erected across this space, in line with the outer walls of the two buildings, thus preventing through drafts and excluding rain and snow.

The architectural design is on the lines of the Spanish renaissance. The exterior is of buff pressed brick, of varying shades. In the main room, and the floor is paved with mosaic of a light color. The pillars supporting the semicircular front of the ticket office are of imitation Sienna marble, and between them is a handsome hammered iron grille, painted black. The decorations are in white and gold. All the wood trimmings, the seats, etc., are of oak, and the general

Green West Driveway

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FIG. 1. PLAN OF UNION STATION AT DAYTON, O. Elzner & Anderson, Cincinnati, O., Architects.

walls these are used at random, thus preventing too flat an appearance. For the tower, boundary wall, etc., however, where a diaper pattern is worked in (as shown in Fig. 3), the darker bricks are selected to form the pattern, while the center bricks in each panel of the diaper work also project slightly from the face of the wall. The window sills, pillars and other stone trimmings are of terra-cotta, matching the color of the brick, while the roof is of dark red Spanish

tile. The tower has a clock with four 10-ft. dials.

The interior is very handsome, but simple in treatment, giving a bright and cheerful effect, and all parts can be readily cleaned. The walls and groined arches are left in the pale gray color of the plaster rough finish, which may be painted in the future if considered desirable. The tall

effect is bright and cheerful. By day, the room is lighted by upper windows and by the numerous glazed doors in the track side of the room. At night it is lighted by elec-

tricity, there being three ornamental 25-light chandeliers and numerous side lights in wall brackets. At one end is a large through drafts and an unnecessary amount of passing to and fro. The ticket office projects outside the rear wall of the waiting room, and is lighted by a skylight in the rear, as shown in the cross-section, Fig. 4. This gives good light from behind, so that the ticket clerks can conveniently see their ticket cabinets, etc. The same arrangement is made for the news-stand and check room. which are on either side of the ticket office. The ticket office has a semicircular front with marble pillars and a grille of hammered iron, the bronze panels at the base of which are provided with four ticket windows. Fig. 5 is an interior view, looking towards the dining room, with the ticket office on the right and the doors to the platform to the left.

an arrangement which results in unpleasant

The toilet rooms are well arranged, equipped with open plumbing, and have marble and metal fittings throughout. The men's room has urinals and water closets, a row of wash basins (with hot and cold water), and a supply of soap and towels, all furnished free. A porter has special charge of this room and the smoking room, and keeps them tidy and clean.

The architects of the building were Elzner & Anderson, of Cincinnati; and the general contractor was S. W. Hornbrook, of Cincinnati. The total

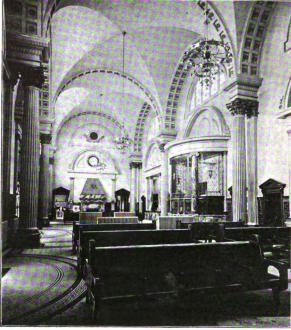


FIG. 5. INTERIOR OF WAITING ROOM; DAYTON UNION STATION.

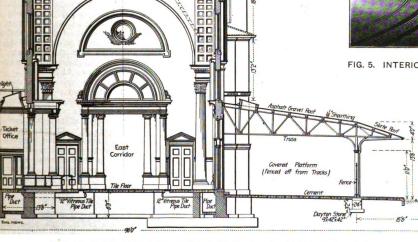


FIG. 4. CROSS-SECTION (LOOKING EAST); DAYTON UNION STATION.

columns which reach from the floor to the vaulted ceiling are painted white, with glit decoration on the flutings and capitals, while the bases are bronze castings. A wainscot about 6 ft. high, of mottled green glazed tile, extends around the fireplace with gas logs, but this is mainly for appearance, the building being heated throughout by steam. The waiting room has doors to the open air on one side only, avoiding the common but objectionable plan of placing doors in opposite sides,

cost of the buildings was about \$150,000. For plans, photographs and information we are indebted to Mr. A. O. Elzner, and to Mr. W. F. Stark, Superintendent of the Dayton & Union R. R., whose office is in the station.

A BALLOON ASCENSION to a height of 33,500 ft, was made by Dr. Suering Berson, a member of the Meteorological Institute of Berlin, on Aug. 1. A minimum temperature of  $-40^\circ$  F. was recorded. This is said to be the greatest altitude that has ever been reached.

A NEW HARBOR is to be made by dredging on the shore of Lake Michigan, near East Chicago, Ind., eight miles east of South Chicago. The channel will be 300 ft. wide and 20 ft. deep and the present contract provides for its extension 1,200 ft. inland. It is intended, however, ultimately to continue the channel to East Chicago. The shore at the point selected is pure sand and breakwaters and piers will have to be constructed to prevent the channel filling up after it has been dredged. The project is being carried out by the Lake Michigan Land Co., and the cost of the improvements is estimated at \$200,000, and