## The New Railway Station, Dunedin.

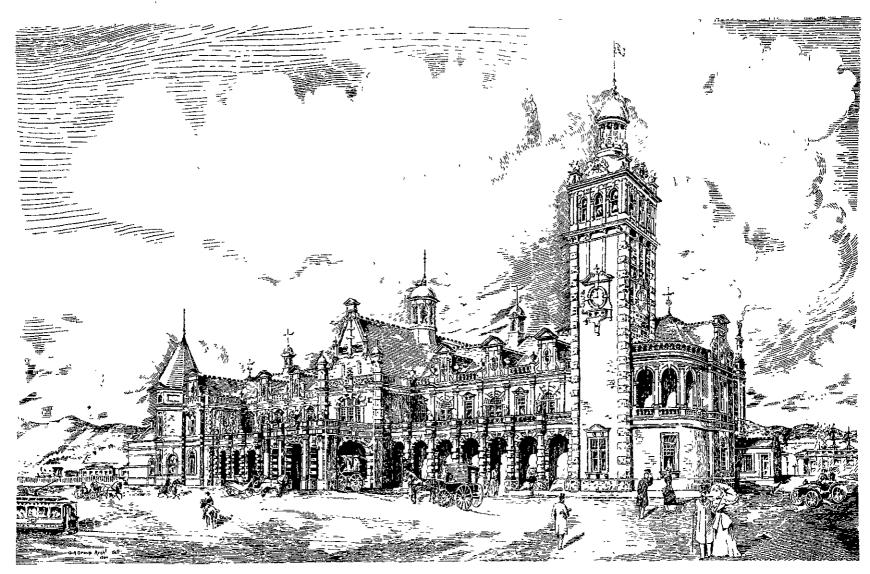
THE accompanying illustration depicts the finest railway station in the colony; the architecture is of the Modern Renaissance style, with Queen Anne of the Modern Renaissance style, with Queen Anne treatment. The total length is 420ft, the depth 58ft. The cost is estimated at £40,000 approximately, exclusive of the foundations. The building was designed in the office of the Government Railway Engineer, and under the direction of Mr. John Coom, chief engineer—Mr. Geo. A. Troup doing the architectural work. The building operations of the polymer Department of the polymer Departm tions are being carried out by the Railway Department, under the supervision of Mr. F. W. MacLean, district engineer.

architecturally harmonious, and at the same time a point of beauty and practical utility. A series of elliptical arches springing from white stone pilasters alongside the red Peterhead granite columns, that are more than two feet in diameter, gives a handsome appearance, and imparts to the front a fine variety of colour.

The main entrance is situated in the centre of the building. A covered carriage-way carried out in stone work, and forming part of the design, projects 20ft, from the colonnade to the extent of 35ft, along the front. The central entrance is surmounted with a righty carried color with the righty carried color with the righty carried with the righty carried color with the righty carried with the righty carried color with the righty carried with the righty carried color with the right with a richly carved gable with turrets, pediments, etc. The northern end of the building terminates in an octagonal tower, the finial of which is 79ft, from the ground. The upper floor, which for the most part is set back to the inside wall of the colon-

Large waiting-rooms are provided for both ladies and gentlemen, and season-ticket holders are to be served at the platform side of the ticket office. The accommodation for luggage and parcels is on a most ample scale—a room measuring 116ft. by 50ft. being set apart—and, in addition there is a special room for bicycles. Rooms on the ground floor are also given to the coaching foreman, guards, and porters and the lavatories are suitably placed. Quite an important feature in the new station is the installator of heating apparatus on the radiator.

the installation of heating apparatus on the radiator system, supplied by Messrs. A. &. T. Burt, Dunedin. Of the various types that have been tried, including high-pressure steam, low-pressure steam, hot water and hot air, the last two have been found to combine the greatest efficiency and safety. The important feature in the system of direct and indirect



THE NEW RAILWAY STATION, DUNEDIN, TO BE OPENED JULY, 1906.

[Courtesy Railway Department.

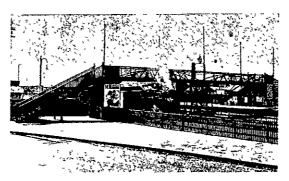
The building is of two storeys, accommodation The building is of two storeys, accommodation for the passenger station-master and his staff, also for the travelling public being provided for on the street level, whilst the traffic and engineering staffs are placed upstairs. The building is most substantially constructed of Otago Central rubble work, with Oamaru stone white facings. Port Chalmers stone is also being used for a portion of the plinth or base course. Polished columns of Peterhead granite along the front materially assist in giving the exterior a very rich appearance. The roof is of Marseilles red tiling and ornamental ridges: all the granite along the front materially assist in giving the exterior a very rich appearance. The roof is of Marseilles red tiling and ornamental ridges; all the walls are plastered, and the ceilings finished and ornamented in stamped steel and zinc.

A prominent feature is the large square tower at the south-west corner rising to a height of over 120 ft. On the corner of the tower the heavy mass of macrony is religiously by pilesters, in the corners.

of masonry is relieved by pilasters in the angles; At a height of 55ft. a four-faced clock is provided for. This clock will be surmounted by scroll pediments with a projecting balcony underneath. The upper part of the tower is finished entirely in Oamaru stone, the design being broken up by Corinthian pilasters and arched openings in between. Four corner pediments, each carrying a lion rampant and four coats of Royal Arms, complete the main portion of the tower before reaching the dome. Over the dome there is a lantern, access to which can be had on the inside circular stair by to which can be had on the inside circular stair by those who, having the privilege, desire to use it in order to obtain a comprehensive view of the city. Adjoining the tower to the south the building is of circular shape. The upper storey is an open balcony enclosed with a stone parapet wall, and divided into arched bays with columns and pil-An open colonnade runs almost the entire length of the building on the street level; this colonnade is a special feature of the design—being

nade, gains relief by the various projections, and is divided into bays by Oamaru stone pilasters; each pair of pilasters supporting a pediment, and thus forming a pleasing break in the parapet line.

The main entrance hall, which measures 42ft. by 32ft., is finished in Faience and encaustic tile work of very handsome design. This hall is a special feature of the building, and the material has been specially selected so as to give facility for frequent hosing in the interest of cleanliness. The floor is



A CONTRAST; THE PRESENT UNSIGHTLY STRUCTURE.

in Mosaic tile work, as are also the stairs and corri-One side of the entrance hall is entirely taken up with the ticket office, measuring 35ft. by 12ft. There are four ticket windows; in addition, four extra ticket windows can be used in the colonnade in case of a rush on holidays. The main staircase leads from the right hand side of the corridor; the same approach access is had to the station-master's office and the ladies' waiting-room.

radiation installed is that the connecting pipies are not relied upon as a heating adjunct, but they merely serve to convey the water. The large surmerely serve to convey the water. The large surface obtained by the peculiar shape of the radiators heats the air passing through and over them, so that the system is really a combination of hot water and hot air. Air is admitted also at the back of and in between the different sections of the radiator through a ventilator, and thus becomes warmed immediately it enters the room.

The new station is of a special fire-proof construction, the joists and the floors being all of steel in encased terra cotta blocks.

encased terra cotta blocks.

## Driving A Nail.

How many hammer strokes does a carpenter use in driving a nail? Perhaps not one carpenter in a thousand or one layman in ten times that number can tell, or ever thinks of it. The truth of the matter is this: the carpenter takes seven strokes in driving a nail into ordinary wood, and twelve regular strokes and two finishing strokes in driving nails into hardwood. These figures are furnished by a man who works at night, and sleeps—or tries to sleep—by day, and whose bedroom window opens out upon a flat building in course of erection. He figured the average number of hammer strokes for three mornings, and, having learned them, moved to a hotel until the new building was completed. He discovered that the carpenter drives an average of three nails a minute in soft wood, and a fraction under three in hard wood. At this rate he would drive 1,440 nails a day in soft wood, if he keeps up the gait steadily, and 1,282 in hardwood. He would give 10,080 hammer strokes in soft wood, and 20,160 in hardwood. How many hammer strokes does a carpenter use