covered ways just mentioned were carried out in the manner already explained, and, as we have stated, the excavated material from them furnished the clay for brick-making.

At Kensington Station the northern of the two branches of the Metropolitan District Railway which connect the "inner circle" with the West London Railway terminates, whilst the Metropolitan Extension line passes through the station and continues its course to Notting-hill, Paddington, and Edgeware-road. The north-eastern end of the station abuts upon High-street, Kensington, under which the Metropolitan Extension Railway passes, and the main portion of the station is 418 ft. long by 90 ft. 2$\frac{1}{4}$ in. in width between the walls, and it is furnished with three platforms and four lines of rails. Commencing on the north-eastern side of the station, there is, first, a platform 14 ft. wide, then a space of 20 ft. 5$\frac{1}{4}$ in., through which the two lines of rails of the Metropolitan Extension Railway pass, then a 19 ft. platform, then a space of 9 ft. 6$\frac{3}{4}$ in., accommodating one of the lines of rails of the Metropolitan District Railway, then a platform 16 ft. wide, and, finally, a space of 11 ft. 2$\frac{1}{4}$ in., in which the other line of the Metropolitan District Railway is situated. The total length of the station is 468 ft., the space of 50 ft. next the High-street being occupied by the booking-offices, &c., leaving, as we have already stated, 418 ft. for the accommodation of the platforms. The arrangement of the booking-offices, &c., is very similar to that adopted at the existing Metropolitan station at Aldersgate-street, access to the platforms being gained by staircases communicating with an end gallery extending across the station. The two lines of the Metropolitan District Railway pass under the booking-offices, and their ends are placed in communication with each other by means of a quadrant turntable, or table pivoted at one end.

The roof of the Kensington Station, which we illustrate in Plates XXXIII. and XXXIV., like those of the other stations which we have mentioned, is formed of a series of wrought-iron elliptical arched ribs, a system of construction which enables an exceedingly fine roof to be made with very great economy of material. In the case of those stations in which the roof springs from near the ground level, the arched ribs are secured to castings built into the side walls, the latter being assisted in resisting the thrust by the pressure of the earth behind them. The arrangement of the castings just mentioned was explained when we were describing the station at Victoria-street on a former page. In the case of the Kensington Station, however, the side walls are carried considerably above the level of the surrounding ground, particularly on the south-western side of the station, and the arched ribs of the roof have, therefore, been riveted to vertical plate girders, built into the walls and secured to castings situated below the ground level. In Plates XXXIII. and XXXIV. we give various views of the details of the Kensington Station roof, and the arrangement of the standards, which we have just described, is clearly shown on the left-hand side of Fig. 13.

The arched ribs or principals are twenty in number, and are arranged at equal distances of 22 ft. apart from centre to centre, two rafters, each composed of wrought iron, 3 in. by 3 in. by 3 in., being placed between each pair. The clear span of the ribs is 87 ft. 2$\frac{3}{4}$ in., and the rise 20 ft., whilst the underside of each is formed to an elliptical curve struck from seven centres, the clear height of the crown of the arch above rail level being about 51 ft. 6 in., but varying somewhat, as the line is on a gradient of 1 in 250 when it passes through the station. The radius of the curve at the crown is 63 ft., whilst on each side of the crown the radii are successively 42 ft., 33 ft., and 22 ft. respectively. Each rib is 18 in. deep at the level of the gutters, and from this point on each side the depth gradually decreases to 16 in. at the crown. Below the gutter line the ribs are shaped, as shown in Fig. 13, the ends which bear upon the standards being 2 ft. 3 in. wide. Each rib is of an I section, the web being 4 in. thick, and the flanges, which are 10 in. wide, being formed of single plates varying in thickness as follows: From the springing to the side lights the plates of the outside flange are 3 in. thick, and from there to the crown they are 5 in. thick, whilst in the case of the inside flange the thickness of the plates is 8 in. at the springing and 6 in. at the crown. The angle irons connecting the web and flanges are 3$\frac{1}{4}$ in. by 3$\frac{1}{4}$ in. by 3$\frac{1}{4}$ in., whilst the rivets are 3 in. diameter, and arranged at a pitch of 4 in. The arrangement of the angle iron joint covers is shown by Fig. 22, Plate XXXIV.

Enlarged views of one of the standards adopted for carrying most of the ribs are given in Figs. 14 and 15, whilst Fig. 16 is a plan of one of the washer-plates through which the holding-down bolts of the standards pass. The wrought-iron portion of each standard is really a vertical plate girt of I section, 2 ft. 3 in. broad, 15 ft. 4 in. high, and of the same construction as the arched rib to which it is riveted. The cast-iron foot to which each of the wrought-iron standards is rivetted is 3 ft. 6 in. high, and has a base 6 ft. long by 12 in. broad at the inner and 18 in. broad at the outer end, the shape of the bottom flange, in plan, being the same as that of the washer-plate shown in Fig. 16, reversed. For principals Nos. 13 to 19 inclusive, counting from the north-western end of the station, the webs and feathers of these castings are 1$\frac{1}{4}$ in. thick, and the flanges 1$\frac{1}{2}$ in. thick; for principal No. 20, however, and for Nos. 5 to...