

Decorative Stones in the Hotel Russell, Russell Square *An illustrated Guide*

The Foyer & Staircase

The Hotel Russell occupies the north east corner of Russell Square. It was designed by architect Charles Fitzroy Doll and completed in 1898 and represented the height of modernity at the time decorated with no expense spared, including being the first building in London to have en suite bathrooms. The striking exterior is clad in Doulton's 'Thé au Lait' architectural terracotta, with friezes of garlands and cherubs and statues of Queens Victoria, Elizabeth, Anne and Mary. The steps at the main entrance are probably of a variety of Carrara marble. Going through the revolving doors to the porch, note the recently refurbished walls clad with Perlato Sicilia, a calcirudite of Oligocene age from the Panormide Nappe of NW Sicily composed of brown shell fragments and cross cut by stylolites.



The grand staircase in the foyer of the Hotel Russell. The walls and stair rails are Brèche de St-Maximin, columns are of Campan Vert and these stand on pedestals of Griotte de Sost, which in turn rest on skirtings of Vert des Alpes.

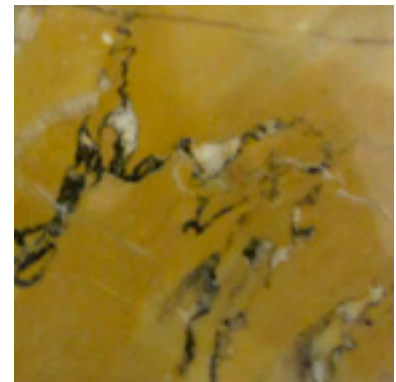
The foyer of the Hotel Russell is famous for its 'sumptuous' marble decoration and it makes for a fine display of primarily French decorative stones. Doll was famous for such interiors and this gave us the colloquialism 'dolloped up' for lavish decoration. Identification of the marbles by this author has been much aided by the works of Renwick (1909) and Elsdon & Howe (1923). Both writers saw the hotel as a prime example of a *fin de siècle* interior decoration and gave the names of the

stones used in its construction. Although the stones used here are described as 'marbles' very few of the examples used in the foyer of the Hotel Russell fit this description geologically. A true marble is a limestone which has been transformed and recrystallised by the actions of an increase in temperature and pressure. This process is called metamorphism and it erases the original features of limestones, such as fossils. However many limestones are capable of displaying a range of colours and are able to take a good polish and they are thus termed 'marbles' by the building trade. Whether or not they have been metamorphosed, many of the rocks seen here have been deformed by tectonic processes active in the Earth's crust. These include movement along faults and the formations of folds in strata, both ultimately driven by plate tectonics. In brittle rocks such as limestones these processes can cause the rock to fracture and break up to form 'breccias'. The jumbled and cemented rock fragments that have formed as a result of these processes have produced many of the decorative stones seen in the Hotel Russell foyer.



The most striking and most abundant marble used in the foyer decorates the walls and the bannisters of the staircase. This is a brightly coloured breccia of yellow and orange clasts of limestone in a pink to strong red matrix. This is **Brèche de St-Maximin** (left), which was known as Rosé du Var at the time of construction of the Hotel. It comes from quarries, which are still operating, between the village of Pourcieux and the town of St-Maximin-la-Ste-Baume in the Var Département of south-east France. The quarries are situated along the north facing escarpment of Mont Aurelien and work Late Jurassic dolomites, brecciated and recemented by the movement of the St Baume thrust fault during the Eocene.

The balustrades of the staircase have an Italianate design formed of carved, pierced blocks of a yellow marble called **Giallo di Siena**. This yellow marble comes from Montarrenti in Tuscany, Italy. It is predominantly a uniform deep yellow colour, but some patches show brecciation highlighted by black and white veining, as shown in the photograph on the right, a sample of Giallo di Siena from UCL's Geology Collections. This is a true marble, unlike most of the decorative stones used in the Hotel Russell. It started life as a Jurassic limestone and was subsequently metamorphosed in the Eocene. The quarries opened in the late 19th Century and the stone rapidly became popular with architects and interior decorators.



Looking up the staircase, this pierced decorative scheme continues around the walls of the landing. Here it is backed with a black stone known as **Belgian Black Marble**. This is a limestone from the Carboniferous strata of Belgium, coloured black by bitumen. It has been worked from quarries in Namur and Hainault since the early Medieval Period and it was also used as a touchstone for testing the quality of gold.

The treads of the stairs themselves, just seen outside the carpet are made of white **Sicilian Marble** from the Alpi Apuane of the Carrara region of Italy. Sicilian has wispy grey veins.

Below the panels of Brèche de St-Maximin in the foyer is a dado course of a deep red limestone called **Griotte de Sost**. This stone also forms the pedestal upon which the columns stand. This rock outcrops along the Pyrénéan mountain range and there are several regions in France and Spain that produce this rock, perhaps the most well-known quarries are at Mauleon-Barousse. The word 'griotte' means cherry, and close inspection will show this 'marble' to be composed of cherry-red

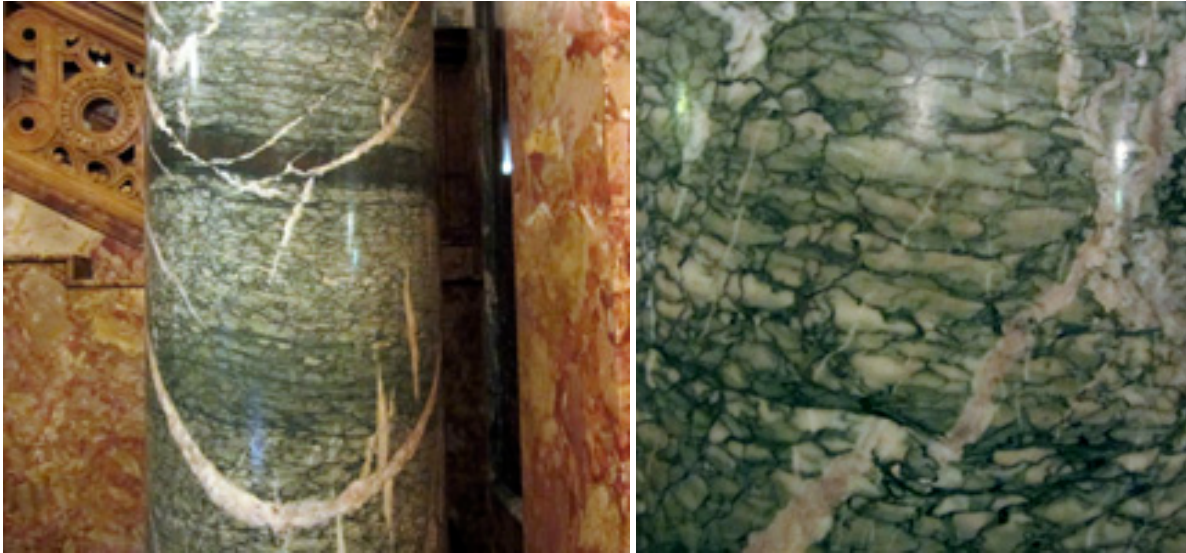
nodules, scattered with white patches of calcite, some of which replace fossils and others infill cavities. The rock is cross-cut by white calcite veins. The red colouration comes from concentration of the iron-oxide mineral, hematite. These limestones are late Devonian – Early Carboniferous in age and contain fossils typical of this time. Examples of these can be seen on the walls of the hotel Russell. Sections through the spiral, chambered, fossil shells of goniatites (see above, the field of view is ~ 4 cm), an ancestor to the modern nautilus, and crinoids, resembling tiny buttons, are also present.

The skirtings below the griotte are made of a dark green rock cross-cut by yellowish veins. This comes from the Cottian Alps on the French – Italian border and it is called **Vert des Alpes** (or Verde Alpi, depending on your perspective). This stone is neither a marble nor a limestone. It is a form of serpentinite, a rock that originally formed part of an ancient ocean floor. It was uplifted and tectonically emplaced on the continental crust during the formation of the Alps in the Cretaceous period when the continents of Africa and Europe collided. Such bodies of rock are known as ophiolites. Geologically the serpentinites lie within a structural unit called the Piemontese Nappe in a region known as the Sezia-Lanzo zone. This zone represents the suture between the two continents and the serpentinites are the remnants of the seafloor crushed between them. The quarries for Vert des Alpes are at Castel, near Gressoney-St Jean in the Val de Sezia, Italy, just south of the peak of Monte Rosa.



Griotte de Sost, rich in goniatites clads the lower walls above skirtings of Vert des Alpes (just seen at the bottom left).

Let us now turn to the columns which frame the staircase and decorate the pillars supporting the vaulted ceiling. These are made of a mottled green rock, sometimes containing chocolate-brown bands, one of France's most famous stones, **Campan Vert** (below). It belongs to broadly the same geological unit as the Griotte de Sost and is late Devonian nodular limestone which has undergone low-grade metamorphism. Outcrops of Campan Vert occur only in the mountains south of the town of Campan. Several quarries are located along the axis of the Espiadet Antiform in the Haute-Vallée de Campan, which have been worked since the Roman period. A range of coloured Campan Marbles are found in the Espiadet Quarries, ranging from deep wine red griottes (Campan Rouge), through maroon, pink, 'peach', green and grey rocks and mixtures of these colours (Campan Mélange). In the Hotel Russell foyer, the stones are predominantly Campan Vert, the colour is imparted by the green mineral chlorite. The rock is cut through by veins of calcite.



Left: column of Campan Vert and Right: close up to show the nodular texture.

Looking up to the ceiling, the tops of the walls, framed in Campan Vert, are decorated with white plasterwork. The panels are bordered with strips of orange-red stone. This is an exotic stone; a Jurassic - Cretaceous aged, dolomite-marble breccia. The whole rock is suffused with red, imparted by hematite which has given this rock its name **Brèche Sanguine** ('blood breccia'). It is also known as Brèche de Kleber after the region of Algeria from which it was derived. The quarries are located in the Gebel Arousse near Sidi Ben Yebka (Kleber), east of the city of Oran in Algeria. These quarries were originally worked by the Romans. They were rediscovered in the 19th century by Emile Delmonte, an Italian living in Algeria, who purchased the land and reopened the quarries. The quarries were worked until the 1950s and the stones attained huge popularity at the turn of the century and were exported world wide.

Returning to the front door, look up to the pediments, once more in Campan Vert on either side of the door. The triangles enclose medallions with the insignia of the Hotel Russell carved from a true marble **Breccia Violetta** from Seravezza in the Carrara region of Italy.



Left: panels of decorative plaster-work are surrounded by borders of Brèche Sanguine; Right: A scrolled medallion with the monogram HR is made of Breccia Violetta on a ground of Giallo di Siena, framed by a pediment of Campan Vert.

The Fitzroy Doll Restaurant

The dining room of the Hotel Russell was named after its architect and designer Charles Fitzroy Doll. Doll was later commissioned by White Star Line to design the dining room on the RMS Titanic and it said he used the dining room of the Hotel Russell as his model. It is certainly a stately room clad entirely in an unusual limestone called Sarrancolin.



The Fitzroy Doll Restaurant at the Hotel Russell. Note the 'book-matched' panels on the walls and the 'quarry-matched' panels on the pillars and pilasters.

Sarrancolin comes from several quarries near the hamlet of Beyréde-de-Jumet, just south of the village of Sarrancolin in the French Pyrenées. The quarries were worked from the 17th - 18th Centuries, particularly for stone for the French Royal Court. They were abandoned in the 18th century but reopened again in 1823. This marble has been particularly popular for making fire surrounds, but its use in the Hotel Russell dining room is one of its most extensive architecturally. The craftsmanship is breathtaking. The walls are clad with panels that have been 'book-matched'; that is with slabs that have been cut from the same block and opened like a book to provide mirror images of the slabs. More remarkable are the 'quarry-matched' slabs cladding the pillars and pilasters. To give the impression of monolithic columns, the cladding has been applied as it would have appeared in natural outcrop with veins and geological features traceable along the length of the pillars. This work requires a great deal of organization and skill with blocks being carefully numbered at the point of extraction and this being carried through the slabbing, polishing, cutting, transportation and application, with information being passed on via the series of artisans employed in these processes.

The decorative quality of the stone from Sarrancolin is derived from the red, pink and orange coloured, laminated infillings and breccias in fissures in massive and brecciated mid-Cretaceous, grey, limestones. Clasts include yellow-colored laminated mudstones, brown, microbrecciated, gravelly deposits and carbonates, red clays are common in the matrix. The rock is cross-cut by white veins and tension gashes. There is some controversy over the age and formation

mechanisms of the Sarrancolin 'Marbles'; Canérot (2007) makes a convincing argument for them being post-tectonic continental deposits whereas earlier authors have speculated on a latest Mesozoic marine origin. In outcrop they are vertically bedded mid-Cretaceous limestones which host karst infill in fractures in their upper surfaces; these are not pervasive to depth and so are interpreted as being post-tectonic (later than Middle - Upper Eocene). The fractures are hydraulic and later fractures have reworked the fill of earlier ones. Canérot (2007) interprets these as Oligocene-Neogene continental exokarsts. However, tension gashes clearly post-date the karst infill indicating that there must have been tectonism subsequent to the karst deposits.



Sarrancolin Marble on the dining room walls, showing brecciation and fissures infilled with red and pink sediment, subsequently tectonised and cross cut by calcite-infilled tension fractures.

Bibliography and Further Reading

- Cherry, B. & Pevsner, N., 1998, Pevsner Architectural Guides; The Buildings of England: London 4: North., Yale University Press, Newhaven and London., 326.
- Canérot, J., 2007, Sur l'origine tectono-karstique et l'âge cénozoïque, tardi (?) et post-tectonique, di marbre de Sarrancolin (hautes-Pyrénées)., *Géologie de la France.*, 1, 83-88.
- Elsden, J. V. & Howe, J. A., 1923, *The Stones of London.*, Colliery Guardian, London., 205 pp.
- Mirouse, R., 2008, *Guides Géologiques Régionaux: Pyrénées Centrales Franco-Espagnoles.*, Dunod, Paris., 112.
- Perrier, R., 1995, *Les marbres verts du Val d'Aoste.*, Le Mausolée., 704, 58-71.
- Price, M. T., 2007, *Decorative Stone: The Complete Sourcebook.* Thames and Hudson, 288 pp.
- Renwick, W. G., 1909, *Marble and Marble Working.*, D. Van Nostrand Co. Inc., New York., 226 pp.
- Hotel Russell: The history of a London icon. *Information booklet produced by the Hotel Russell.*

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