

Spinel Tapped

A ruby or not a ruby? That is the question when considering the dazzle of a spinel. The jeweller LAUREN ADRIANA hails a significant gemstone



CROWNING GLORY

Queen Victoria, depicted at her coronation in 1838 in a state portrait by George Hayter. She wears the Imperial State Crown with the 170ct Black Prince's Ruby (a large spinel) on the front cross

Sixteen years ago I sat in a small office in Hatton Garden, the centre of London's jewellery district, staring into a tray of what I believed to be some impressive rubies and sapphires. It was my first day of work experience for stone dealer and gemologist Marcus McCallum, and to my 15-year-old self it was like working in a sweet shop. Poring over the stones, and desperate to impress, I tried to show off my limited knowledge. Holding up a

small box containing a pinkish-red stone, I declared it a ruby—only for Marcus to correct me without looking up: “No, it’s a spinel.” I couldn’t even pretend to have heard of this gem, but it was the start of a now long-held fascination with the history and characteristics of this remarkable stone.

Spinel is composed of magnesium aluminate, which is coloured by chromium and iron. It comes in an extraordinary spectrum of colours—not just reds and blues, but vivid pinks, oranges and browns, deep purples, pale lilacs and pure black. At number eight, it is high on the Mohs scale, used for determining the hardness of gemstones, with only rubies and sapphires at



RIGHT ROYAL TREATMENT

From top left (left to right): Edward, Prince of Wales, aka “The Black Prince”; Catherine the Great wearing the Russian Imperial Crown (left) topped by a 398.72ct spinel; the Imperial State Crown with the Black Prince’s Ruby. Below: the Bonhams Hope Spinel

so gave birth to what is now known as gemology. Prior to this discovery, the study of gemstones was more of an art than a science, and just as my teenage self had done, every bright red gemstone was named a “ruby” and every vivid blue gemstone a “sapphire”. The gem traders of Myanmar, modern-day Burma, were the first to recognize spinel as being different to ruby in the 1500s, most likely from their experiences of cutting and polishing the two materials. In Europe, however, the

stone continued to be misidentified into the 19th century. “Spinel” is an ancient name that may derive from the Latin word *spina* meaning “little thorn”—perhaps a reference to the sharp points found on the rough crystals. Indeed, some spinel crystals are so perfect when they are found that in Burma they are said to be *nat thwe* or “polished by the spirits”. Spinel has been documented in literature dating from the 16th century. In medieval times the gem was known by another name, “Balas ruby”, which derives from an ancient word for Badakhshan—a province on the border of northeastern Afghanistan and Tajikistan famous for its spinel and ruby mines, documented in the 13th century by Marco Polo.

These Balas rubies

were the treasured property of kings and emperors, often passing through many hands as spoils of war. The tale of the 170ct Black Prince’s Ruby that now sits in the Tower of London follows a similar story to most other significant spinel gemstones. The gem was most probably mined in Badakhshan, and its first appearance is in the historical records of early 14th-

number nine and diamonds the hardest at number 10. From a jeweller’s point of view, this makes the stone perfect for rings and for setting into more technically challenging designs. And, of course, the wide array of colours is a source of endless inspiration. Spinel also possess a vivid fire, and the intensity of colour and sparkle is due to spinel being singly refractive, an honour that diamonds and garnets can also claim, but rubies and sapphires cannot. Looking at a spinel, you will see light and colour dazzle in a way rarely seen in other gemstones.

I wasn’t alone in my early misidentification. Spinel is a gemstone that has for centuries been confused with sapphires and particularly rubies. Some of the world’s finest stones in historic royal collections are not rubies at all, but spinels—from the Black Prince’s Ruby, held within the British Imperial State Crown, to the Timur Ruby set in a necklace for Queen Victoria, from Catherine the Great’s Ruby sitting atop the Imperial Crown in Russia to the Côte-de-Bretagne in the French crown jewels. It is testimony to the spinel’s beauty and legacy that a gemstone still unheard of by most people today should come to reside in the most prestigious of royal jewellery boxes.

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BONHAMS (HOPE SPINEL); HEVER CASTLE LTD, KENT, UK/BRIDGEMAN IMAGES (BLACK PRINCE); LEEIMAGE/CORBIS VIA GETTY IMAGES (CATHERINE THE GREAT); WORLD HISTORY ARCHIVE/ALAMY STOCK PHOTO (BRITISH IMPERIAL CROWN); AKG-IMAGES/SPUTNIK (RUSSIAN IMPERIAL CROWN)

century Spain where it was in the possession of a Moorish prince, Mohammed of Granada. A succession of Moorish and Spanish kings then owned it, before Edward, Prince of Wales (known as the Black Prince) received the stone as payment for victory in battle in 1367. By the time it was mounted into the Imperial State Crown in 1838, the stone had already been identified as a spinel—but the name “ruby” was attached to it forever.

By the early 1900s, genuine spinel began to fall out of favour with the invention of synthetic spinel. First produced in 1847 by the French chemist Jacques-Joseph Ebelmen, commercial production of synthetic spinel was initially very limited. By the 1930s, however, these synthetic stones were widely available in a broad range of colours. Synthetic spinel was used to cost-effectively imitate other popular gemstones, such as emeralds, aquamarines, and of course sapphires and rubies. These synthetic stones were people’s first encounter with spinel and for the majority of jewellery consumers, the association of spinels with “fake” jewellery has stuck.

It was the discovery in August 2007 of a vibrant pink spinel deposit in Tanzania which began to change opinion. In a farmer’s field in Mahenge, workers found a giant spinel crystal weighing 52 kilograms. The stone displayed the vivid cherry-pink colour and neon-like glow for which Mahenge spinel has now become famous. This particular find only yielded a few thousand carats of material and appears to have been a one-off discovery, which is not unusual for remarkably fine gems, as has been the case for Kashmir sapphire and Brazilian Paraíba tourmaline. Despite the fact that most people will never see or own one of these stones, it revived interest in spinel throughout the industry and marked the discovery of Mahenge spinel as one of the most important finds in recent history.

Today, collectors and jewellers alike are of one mind as to spinel’s importance. In 2015, the V&A hosted *Bejewelled Treasures: The Al Thani Collection*, an exhibition of jewels and jewelled artefacts belonging to Sheikh Hamad bin Abdullah Al Thani. This collection—which contains fine examples of spinel jewellery, including a pair of earrings commissioned

IN THE PINK

From right: earrings in collaboration with Siegelson with pinkish purple spinels; Fractal earrings; and a Mahenge spinel ring, all designed by Lauren Adriana



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from contemporary jeweller JAR (the Paris-based Joel Arthur Rosenthal) as well as historic pieces made for Mughal emperors—will be exhibited again from September 9 at the Doge’s Palace in Venice. Then, in the autumn of 2015, a rose-coloured 50.13ct spinel, known as the Hope Spinel, sold at Bonhams for £962,500, almost five times its high estimate of £200,000. This rose-hued gemstone once belonged to famous gem collector Henry Philip Hope—of the infamous blue Hope Diamond—and set a world-record price for spinel of £19,200 per carat.

Recently, significant deposits of spinel have been found in Cambodia, Sri Lanka, Thailand and Burma among other places, and jewellery houses are turning their attention at long last to promoting the impressive variety of spinels from these localities. For its one-off Blue Book creations, Tiffany regularly features spinels in vibrant reds, pinks and rare cobalt blue, setting them as majestic centre stones in their own right. Cartier has showcased spectacular deep pink spinels from the historic Kuh-i-Lal mines in Tajikistan, and both Chopard and Louis Vuitton have debuted remarkable spinels in electric lavender and violet colours as part of their high jewellery collections.

As one of the oldest recorded and most historically significant gemstones, it was perhaps not overdue for spinel to have been named the birthstone of August last year by the American Gem Trade Association and Jewelers of America. It shares the month with peridot, which is good news for all August babies not in love with the colour green—and even better news for spinel enthusiasts such as myself to see this extraordinary stone reclaim its place in the pantheon of fine gems. □



THE AL THANI COLLECTION

From left to right: turban ornament from North India (1675-1750); the Imperial necklace (1600-50)—four of the spinels bear inscriptions in Persian; earrings from contemporary jeweller JAR

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