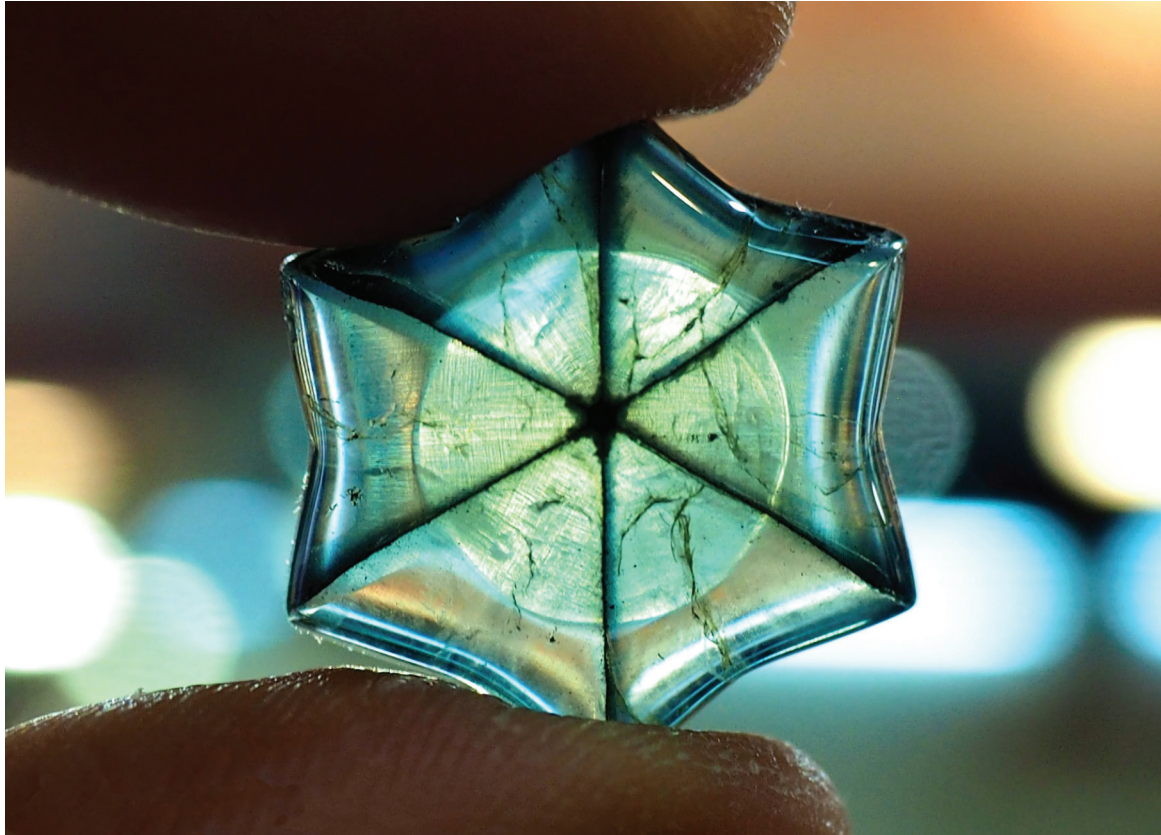


# THE AMAZING TRAPICHE

Gemstone enthusiasts understand feeling passionate towards a certain variety of gem—the kind that speaks to them whenever they see it, the kind they can't leave behind no matter the price. But, if they ever do leave it behind, they never forget it, and always regret it. One such category of gemstones is the very unusual *trapiche*.

By Barbara Wheat



It's a gemstone that you don't see very often, but one that is very popular with gem enthusiasts around the world. For those of you who are not familiar with this hexagonal rarity, the word *trapiche* comes from the Spanish word for a wheel with six spokes used to crush sugarcane. Pronounced trah-pee-chay, the Spanish wheel has a striking resemblance to the hexagonal pattern found in these remarkable gems.

When it comes to these unusual gems, one of the most knowledgeable experts is Jeffery Bergman, the director of Primagem in Thailand. With more than 40 years of experience in gemstones and jewelry, he understands the kind of passion many people feel towards gems, especially the trapiche variety.

Bergman's name is so connected with these rare and unusual gems that people contact him from all over the world to seek his opinion about them.

He describes trapiche gems and the fascination with hexagonal patterns as “a study of hexagonal geometry encountered in nature, religion, mysticism, science, culture, architecture, art, and gemstones.”

Bergman notes that geometric shapes have always appealed to humankind, with the first encounters most likely coming in the form of honeycombs or snowflakes.

The gem first identified with the trapiche structure was the emerald. “Trapiche patterns in emerald are due to bands of inclusions that radiate from the center of



Matched pair of Colombian trapiche emeralds, total weight 7.30 carats. (Photo: Jeffrey Bergman)



A 6.24-ct cloud-cut trapiche emerald set in gold with diamond accents by Erica Courtney.



Colombian trapiche emeralds by Valencia (Colombia).

Cufflinks with trapiche emeralds set in gold with diamond accents by Pamela Huizenga.



Opposite page: One of a remarkable matched pair of Colombian “starfish” trapiche emeralds, 24-carats total weight. (Photo: Jeffrey Bergman)

the crystal—the optic axis—toward the prism faces,” he explains. “Unlike moving asterism in rubies and sapphires, the fixed ‘star’ pattern in trapiche emeralds is caused by the simultaneous hexagonal growth of albite, often mixed with graphite.”

He described the variety coming only from the nation of Colombia as having “six spoke-like albite-graphite ‘rays’ emanating from a hexagonal center with the areas in between filled with emerald.”

Bergman also has, without a doubt, the largest private collection of trapiche gemstones in the world, many of which would be welcome additions to many museum collections.

Emerald is not the only gem with a trapiche structure. Ruby, sapphire and tourmalines have also been found with trapiche-like patterns, but quality specimens are very rare. Trapiche patterns in sapphires are due to strong color banding parallel to the hexagonal growth zoning. Other non-inclusion based trapiche gems include garnet, quartz and chalcedony.

Regardless of the type of this extraordinary gem or its color, one thing is very certain. It is truly an amazing trapiche. ♦