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The World's Most Glamorous Quarantine Project

By Geraldine Fabrikant | Nov. 28, 2020

While you've been binge-watching Netflix and peering anxiously at your sourdough, John Hatleberg has been working on replicas of the Hope Diamond and its earlier incarnations for the Smithsonian.

From left, the Tavernier, French Blue and Hope Diamond replicas. John Bigelow Taylor and Dianne Dubler

In the midst of the pandemic, diamonds (at least newly mined ones) may have lost their luster. But in the studio of his New York apartment, John Hatleberg is betting it will soon be back.

For months, he has been at work hunched over a gem-faceting machine, where he is cutting and polishing a synthetic material that will be used to make an exact replica of the Hope Diamond as it existed in the 17th century.

Perhaps no diamond has as much glamour as this luminous blue 45.52-carat stone, encircled by 16 white diamonds and set on display in the Smithsonian's National Museum of Natural History (temporarily closed, but its treasure twinkles 24-7 online). Heavy in mystique as well as weight, it is replete with a history of a royal owner, theft and family curses and has long been the most popular object at the Smithsonian, where about four million visitors a year used to come gape at it.

But the current Hope diamond is only the latest version of the stone. The diamond, first bought from a mine in India, was recut as the "French Blue" after King Louis XIV acquired it. Stolen during the French Revolution, it resurfaced in 1812 in London and was recut into its current style and named for its owner, Henry Philip Hope.

Having completed replicas of the original stone and the Hope itself, Mr. Hatleberg has been laboring since the winter to finish the "French Blue."

He strives to assure that his replicas have the exact same angles and color as their inspiration, a process that involved seven trips to Azotic LLC., a laboratory for gems and crystals in Rochester, Minn. There, experts coated and recoated the replica using a thick level of precious metals to match the lush blue of the Hope.

Mr. Hatleberg is not working for some wealthy private client who wants a knockoff for travel. Instead his three replicas will appear next to the Hope at the Smithsonian. When?

Who knows?

‘An Interesting Shade’

The art of replicating diamonds is a delicate one, and perhaps no one has worked directly with so many named stones as Mr. Hatleberg, 63, who made a replica of the 31.06-carat Wittelsbach-Graff diamond for Laurence Graff, the billionaire diamond dealer, and the 273.85-carat Centenary diamond that was discovered in 1986 by DeBeers, the giant diamond company.

So perfect was his copy of the Centenary that when a group of DeBeers executives were invited to compare the two, “some could not immediately tell the difference,” said Rory More O’Ferrall, the manager of marketing liaison at the time.

For the Okavango Diamond Company, Mr. Hatleberg recently completed a copy of the Okavango Blue, a 20.46-carat fancy deep blue diamond found in 2018 in Botswana. “We wanted a replica because we need to hold on the legacy of the stone for future generations.” said Marcus ter Haar, the managing director of the Okavango Diamond Company, which is selling the original, in a telephone interview.

Ooh, sparkly! The Wittelsbach-Graff Diamond replica.
John Bigelow Taylor and Dianne Dubler

Not your mother’s cubic zirconium: the Centenary Diamond replica.
Tino Hammid

A perfect replica is an art form that, for Mr. Hatleberg, can require months and even years of work. Though the Smithsonian has seen many replicas of the diamond, “we have had the luxury of looking at people doing that kind of work, but John is an artist with a sense of detail and perfection,” said Jeffrey Post, the curator of the U.S. National Gem and Mineral Collection at the Smithsonian who hired him. “When John hands me a stone, I know he has thought about and analyzed it, and he would not hand it to me unless he thought it was perfect.”

For the Hope Diamond, “the difficulty was matching the color,” Mr. Post said. “It is an interesting shade, not like other shades of blue. We wanted exact replicas.” For the museum, the goal was “not to sell but to help tell the story of the history of diamond. Visitors see the sizes and shapes in a powerful way to give the history of the cutting of the stone. You cannot simply show a picture of a three-dimensional object.”

Most great stones attract enormous publicity when they are first brought out of the mines, cut and polished. But after the hoopla, the diamonds often disappear into coffers of the very rich, only to reappear when an auction hammer comes down on a mega-million-dollar sale. (The diamond industry as a whole has also seen critical headlines in

recent decades, as human rights abuses and the trade of so-called blood diamonds have come to light.)

Years ago, some diamonds were bought by socialites and movie stars who relished showing them off to friends and the press. The American heiress Evalyn Walsh McLean, the Hope's last private owner, often wore it in public — or occasionally put it around the neck of her dog or wore it when she gardened. Richard Burton made headlines in 1969 when he bought a 68-carat diamond for Elizabeth Taylor, naming it the Taylor-Burton diamond. Just after the actor bought it, Cartier, the seller, put it on display in New York where 6,000 people a day lined up to gape.

But in recent years "movie stars generally don't buy them, they borrow them," said Henry Barguirdjian, a former chief executive of Graff USA and managing partner of Arcot, a gem investment firm, in an interview shortly before he died in October. And he added, "In America there are people who love to buy precious stones, but they are usually business people and completely anonymous. In Asia they buy the way Americans used to buy: for status symbols."

In 2015, Joseph Lau, a businessman in Hong Kong, set a record of $48.4 million buying a 12.03-carat diamond at Sotheby's called "Blue Moon of Josephine" for his 7-year-old daughter just after buying a 16.08-carat pink diamond, "Sweet Josephine," for $28.5 million from Christie's.

The Hope, often cited as a metaphor for ne plus ultra, is unusual in that it has been on view for over 60 years. (To be sure, both the French and British crown jewels, on public display, include extraordinary diamonds: among them those cut from the 3,106-carat Cullinan, found in South Africa in 1905, and the 105.6 carat Koh-i-Noor, found in India.)

The Hope's path to America was circuitous. After Jean Baptiste Tavernier sold it to King Louis XIV in 1668, the Sun King ordered it recut in a more symmetric style popular at that time. It was then set in gold and suspended on a neck ribbon that the king wore for ceremonial events.

After its disappearance in 1792 and reappearance in London it was sold and resold until it ended up with Ms. McLean when her husband, a publishing scion, bought it in 1911. Wealthy, yes, but ill-fated. Her eldest son died in a car accident and her daughter from a drug overdose. At her death, Harry Winston bought her entire jewelry collection and in 1958 gave the Hope to the museum.

In reproducing it for the public, Mr. Post sought a sense of what the diamond had looked like in each of its three iterations.

'Nuts About Gems'

Mr. Hatleberg's interest in such work started in childhood: His mother was a documentary photographer for the Smithsonian's gem collection. Growing up in Bethesda, Md., he recalled, "We all studied geology in school back then. People brought in crystals, agates and everything. I was nuts about gems, so my mother found a center for retirees at a community recreation center where there was a course in gem cutting. I loved it."

After getting a graduate degree in sculpture at Cranbrook Academy of Art, Mr. Hatleberg supported himself doing faux finishes and other types of artisan works.

He first had access to the Hope diamond in 1988 when he made a mold of it that he used for chocolate copies that were, for a while, sold in the Smithsonian gift shop.

Mr. Hatleberg's faceting table.
John Bigelow Taylor and Dianne Dubler

Then in 2007, “I learned about a new method to color match my diamond replicas,” he said. “Before that it was difficult to color match fancy colored diamonds.” That connection was extremely valuable since colored stones are generally the most prized.

“‘Colorless’ material gives you much less to worry about,” said John King, a former laboratory chief quality officer at the Gemological Institute of America. “The richer colors are more valuable. But when you begin to color it and you are not satisfied with the original color, it is a much bigger problem.”

The process can be nerve-racking, “We do multi-iterations,” said the president of Azotic, Steve Starcke. “It can be a little too purple or a little too blue in our initial samples. John would say, ‘Can you push it a little more in this direction?’”

Constructing how the Hope diamond looked in its earlier lives was a sleuthing adventure. The original Tavernier stone was reimagined from drawings of the period. The second was a mystery until 2009 when François Farges of the Museum National d’Histoire Naturelle in Paris uncovered a long-lost lead cast of the stone.

Barbara Barrett, the U.S. Secretary of the Air Force who served as a Smithsonian board member, supported the project with her husband, Craig, Mr. Post said.

Mr. Hatleberg is far from the only person creating copies. Many are made using colored cubic zirconia. Scott Sucher, who specializes in replicas of famous diamonds, generally relies on photographs and line drawings to create his works, though there have been some exceptions. For the Koh-i-Noor, the Natural History Museum in London lent him a plaster model of the historical version of the diamond.

He then had it laser scanned in Antwerp, Belgium, and used that data as a guide for cutting. For a Discovery Channel program, Mr. Sucher had access to the original and created a replica using colored zirconia. As part of the arrangement, the Discovery Channel gave it to the museum although it is not on display. In a telephone interview, Mr. Sucher said copies of his work are in numerous museums.

Of course, many of those are now closed.

Meanwhile, the progress of Mr. Hatleberg, who only makes molds from the original stone and finds cutting almost as daunting as getting the color right, has been slowed by travel restrictions.

When he made his 1992 replica of the Centenary, “I went back and forth to London every two months for over a year,” he recalled. “It was extremely difficult because of the design of the facets. The whole top of the diamond was cut with angles that are less than 15 degrees. That meant the differential in the angles was tiny and hard to control.”

To get an idea of how difficult the original cutting was, DeBeers set up a special underground room in Johannesburg for a team led by Gabi Tolkowsky, the renowned diamond cutter, so as to preclude any technical factor that might interfere with the cutting. “Vibration is problematic, and the city is given to tremors, in part because of the gold mining that has taken place there,” Mr. More O’Ferrall said.

For most people, the isolation of the pandemic may have made work difficult. But aside from not being able to travel, or deliver the finished “French Blue,” for Mr. Hatleberg this may be the ultimate quarantine project. Even after making copies of dozens of major stones, the work has not lost its appeal. From the first, he said, he found the gems: “rare, valuable and beautiful. They completely intrigued me.”

A diamond is forever, in other words — and lockdown is only temporary.