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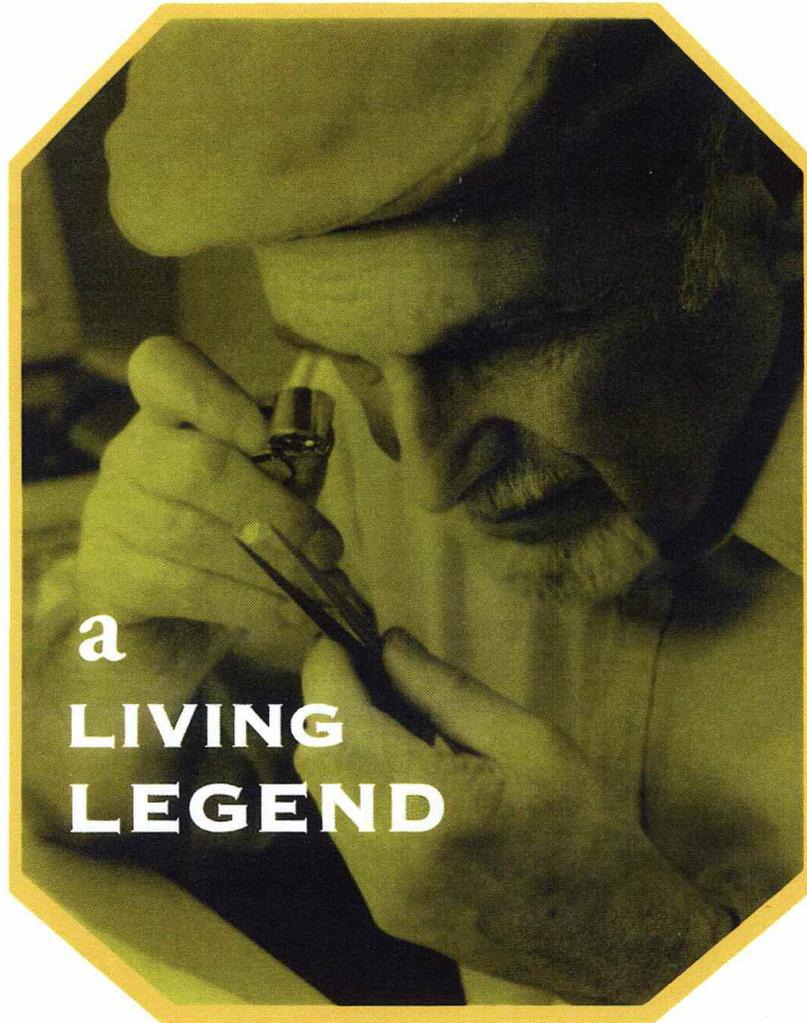
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Diamond Industry

Henry Grossbard,
the man who
invented the original
Radiant Cut diamond
unleashed a flood
of fancy cuts that
today are the bread
and butter of the
diamond industry.

By Ettagale Blauer



Henry Grossbard had a dream. “Back in 1976, when I first developed the Radiant Cut,” he says, “my goal was a simple one. At that time, emerald cuts were out of favor due to their lack of brilliance. Since I was always a fan of this elegant shape, I wanted to create a new cut that retained the shape of a traditional emerald cut but infused it with the brilliance people expected of their diamonds.”

With that he sat down at his bench to work out the details. “I am a diamond cutter at the bench. I am not a pencil and paper creator. I worked with the actual stone,” he says.

It was an expensive kind of experimentation. In order to capture the reflections that are the essence of the round or brilliant cut, he had to work with high clarity

diamonds. "I could not work on cheap goods. Imperfections interfere with reflections. Any imperfection would distort. The stone had to be clean," Grossbard recalls.

He set about to create what he calls a "hybrid cut—one that retained some of the step cut rectangular facets characteristic of the traditional emerald cut, but blended in some of the triangular and kite-shaped brilliant cut faceting of a round diamond."

The result was pure magic. In 1977, when I first saw the Radiant Cut, I wrote that it "dazzled with fire." That description hasn't changed. Indeed, the Radiant cut became even more radiant as Grossbard worked to improve upon his original, patented invention.

In 1980, he earned a second patent by altering the arrangement of the facets to bring out more color in the stone. That turned many a Cape yellow into a fancy intense yellow, improving the bottom line along with the color.

But with success comes imitators—lots and lots of imitators. Grossbard found himself facing a potential sea of litigation to protect his invention. At the same time he was unable to produce enough product to fill the demand he had created.

"In the beginning," he recalls, "I litigated. I won a big lawsuit in Israel." In time he granted licenses to certain manufacturers to produce Radiant cut stones.

But firms got around his patent by altering the facet design. He spawned a virtual industry of look-alikes with the biggest imitator of all being the princess cut. On reasonably

close inspection, that square stone with the sharp corners bears little resemblance to the Radiant cut, but it was produced in quantities and become a new standard.

"People often treat Radiants as though they are simply princess cuts with the corners cut off. Nothing



could be further from the truth," he says.

Because the princess retains more of the rough diamond weight than a Radiant, there are more princesses on the market. Grossbard says there is a world of difference in the faceting, proportioning and appearance. "Cutting off the corners of a princess results in a princess with cut corners, not a true Radiant cut," he states.

Grossbard's dream was to make Radiant cuts that hewed to his original concept. "When I was the only one cutting Radiants, I could ensure the cut quality of each stone.

Today, with so many people cutting Radiants, a full range of makes can be found, from awful to beautiful. Unfortunately, the knowledge needed to evaluate cut quality in a radiant is not widely available," he says.

"The problem of evaluating cut is made worse by the misplaced reliance on GIA certificates to establish cut quality. While the information contained in a GIA certificate is a useful starting point, far more information is needed. The hybrid nature of the Radiant cut adds additional reflections and makes evaluations of cut extremely complex. The vast majority of Radiants with 'nice' GIA certificates, nevertheless, look small or lack life," he notes.

Grossbard tried to convince the GIA to use the term "Radiant cut" on its certificates instead of the more awkward "cut corner rectangular modified brilliant." Grossbard says, "I was willing to give up the trademark if the GIA would call it a Radiant cut."

But GIA wouldn't, consistent with its policy of not using brand or trademark names. But oh, how much simpler it would have been for everyone if they had done so.

Part of the reason, other than the brand name problem, may have been a reluctance to certify exactly what makes a radiant cut act like a Radiant cut. On that subject, Henry Grossbard and his son Stanley are effusive with details. Stanley, who was a practicing lawyer before he joined his father's business in 1988 says, "We do not believe that the facet arrangement alone makes a diamond a Radiant cut."

Stanley, who humorously calls



himself “a Radiant cut idiot savant,” knows more about Radiant cuts than anyone alive—except his father.

According to both Grossbards, there is no single facet arrangement that is ideal for the Radiant cut. It is the proportion that is important, they say.

The original utility patent covered most of the variations on the market. To be a true Radiant cut, the stone must have pavilion main facets that reach a step cut facet below the girdle. The step cut facet is the connection with the emerald cut. Conventional triangular lower pavilion facets point toward the culet. It is this brilliandeering on the bottom that makes it a Radiant cut and is, according to the Grossbards, the element that brought in the newer generation of diamond cuts. All of them include the brilliandeering on the bottom.

Today’s Radiant cut follows a cutting pattern that leads to what they call the “crushed ice” or kaleidoscope look. The stone comprises very small facets that appear like little dots. Henry says, “I rotated the faceting so that the culet was formed not by facets from the sides of the stone but from the corner of the stone. It is the one facet that permits us to get the crushed ice look.” He adds, “This

is created by having flatter pavilion facets leading to more brilliance. However, if you cut too flat, you wind up with light leakage. If you cut too high, you get a black circle within the stone rather than a light circle. There is more internal reflection in a Radiant cut than in a round stone because the light spends more time in the diamond. It reflects three to four times in the stone.”

Hence, the radiance that emanates from the properly cut Radiant diamond. “There is more than one table reflection, more than one girdle reflection,” Stanley says. This has led to a revolution in cutting fancy cutting diamonds because the color in a diamond is in the girdle.

When the Grossbards look at the diamonds currently listed as “Radiant” on the Rapaport Diamond network, they say 93 percent of the stones do not meet the standard. In their opinion, the depth percentage should not be used for a guide. “Look at the brilliance,” says Stanley. “The Radiant cut looks its size and has the right brilliance. The brilliance comes from contrast. For a well made stone, the depth and table should be in the 60s,” with good polish and symmetry.”

They have little patience with demands for ‘excellent, excellent’

ratings because they say those do not connote a finely made and brilliant Radiant cut stone.

“The bottom of the stone needs to be proportional,” Stanley continues. “Radiant cuts are generally flatter, not deeper. The Radiant cut has two facets down from the girdle to the culet, unlike a round where there is one facet. The way to evaluate a stone is in what you see. The difference in proportion makes a huge difference in how it reflects light. The rating of ‘excellent, excellent’ makes no difference in reflecting light. It only shows symmetrical faceting which is not the way a Radiant diamond is cut. ‘Excellent, excellent’ does not rate the symmetry of the brilliance. The visual appearance is what should be rated.”

But visual appearance, as we all know, is very difficult to quantify. That is why people rely on the GIA certs and the numbers and that is why they sometimes wind up with Radiant wannabes.

“The depth must be properly distributed between the crown and the pavilion; the depth must be properly distributed within the pavilion itself. The extra pavilion angle, due to the hybrid nature of the cut, creates an additional variable,” Stanley adds, and that is why they say the GIA certificate is insufficient to assess the quality of a Radiant cut.

In the beginning the Radiant cut was designed with 70 facets. Today, Stanley says, most have 66 facets. "Dad discovered you don't need as many facets on the short side as on the long side."

Henry Grossbard says "I think rivaling my contribution to creating the Radiant cut is to create the fancy Radiant cut. More than 80 percent of the fancy colors we see are Radiant cuts. I had the idea to see what happens on yellow diamonds. In white diamonds, they want to cut a diamond with the best face. I wondered, 'What if we take a yellow diamond and want to emphasize the color? You do the opposite.'"

Henry is modest in the extreme, explaining that no invention, even his, arises out of the blue. It is built on the shoulders of those who came before. He cites particularly the work of Basil Watermeyer, the South African master cutter who designed the Barion cut, which has a traditional step-cut crown and a modified brilliant-cut pavilion. "He was the pioneer. He found the solution for square stones but never solved it



for rectangular stones. I solved it for rectangular stones," Henry says.

But Henry's modesty, as well as his modest financial situation, made it impossible to promote the amazing cut he had designed. He had to watch as the rest of the diamond world capitalized on his invention. As a result, the much less spectacular princess cut has the name recognition.

That was one of the reasons Stanley decided to leave his law practice and join the firm. He is the third generation of Grossbards in the diamond business. "My father and grandfather came over from Austria in 1941 when Dad was 16. They learned to cut diamonds together although my grandfather wasn't particularly good at it," he says.

Stanley grew up around the business and worked in the firm for a year between college and law school. He took the GIA grading course and says he learned the cutting end "by osmosis." He left the law practice in order to help his father gain his rightful place in the industry.

"My father was a genius diamond cutter, not a genius marketer," Stanley says. "In spite of how long it has been around, the Radiant cut has a small public profile."

In order to rectify that, and to reclaim the reputation of a well-cut Radiant stone, they now sell and promote their goods as "The Original Radiant Cut Diamond," in much the same way as the Royal Asscher cut is sold in spite of a sea of Asscher look-alikes.

Stanley says, "Our cutting standard hasn't changed but the way we describe it has changed. We now explain the standards. Every stone meets those standards. We have nine different parameters that we check. The GIA cert is not enough. We make it go through different tests to sell under our brand name." ♦