



Co-Axial **PARTNERSHIP**

By Elizabeth Lilly Doerr

The new 40-mm rose gold Daniels timepiece is very similar to the 68-mm pocket watch that Daniels created in 1994.



Thirty-five years after inventing the co-axial escapement, **GEORGE DANIELS** partners with **ROGER SMITH** to release a limited-edition series of very English wristwatches

Thirty-five years ago George Daniels invented the co-axial escapement, his solution to the eternal horological search for an oil-free movement. Most watch enthusiasts think of Daniels in conjunction with this invention. However, he did more than invent escapements; in fact, one of Daniels's life-long passions was to make watches, complete watches, fully by hand. Each of these watches, however, began life as a vehicle for testing escapements, and thus they remained unique specimens.

Daniels didn't make anything resembling serial watches until 1999. Until then, he had made unique pocket watches, each one different from the one preceding it. According to Daniels, there are no more than thirty-seven in existence—not including prototypes—and

this number is not destined to grow since Daniels has since ceased making them.

In 1999, to accede to the wishes of some of Daniels's own friends and clients to own a watch he has signed, Daniels created the Millennium wristwatch: a series of fifty pieces based on the Omega ébauche that uses his extra flat co-axial escapement. Obviously, Daniels would need help to complete this, which is why he asked the young watchmaker Roger Smith—the only apprentice Daniels has ever taken on—to assist him.

CO-AXIAL ANNIVERSARY EDITION

Smith explained to *International Watch* in a recent exclusive interview that Daniels, now aged 84, approached him in a very "fired up" manner to do another

Millennium-style project to celebrate the 35th anniversary of the co-axial. Smith thought a more classic Daniels would be the order of the day.

"This new watch will be no compromise," Smith explains. "It should have the same feel as a Daniels; it will represent a seamless connection to the work he did in his prime," Smith explains.

The prototype draws on Daniels's complete body of work, Smith explains. Daniels and Smith worked together to create a new English-style caliber, finished and styled to Daniel's exacting standards. Smith will execute the complete manufacture in his small, high-tech workshop on the Isle of Man.

In order to complete the project, which will be signed "Daniels," Smith has hired more watchmakers to complement



Smith and Daniels discuss the new wristwatch at George Daniels's Isle of Man estate.

his team, which now numbers six and includes experienced watchmaker Andy Jones and engineer Andrew Dallison.

CO-AXIAL PRINCIPLE

The co-axial escapement can be considered a milestone breakthrough of the mechanical renaissance. Not only was its design created to reduce the need for oil, but it also represents the first new working escapement in contemporary horology that has performed as well as the standard Swiss lever escapement.

Telltale of its importance is perhaps the fact that the Swatch Group took on the monumental task of making it suitable for use in serial movements—an accomplishment that required a decade and millions of Swiss francs. Currently the co-

axial escapement is only used by Omega, though a modified version can be found in Roger Smith's timepieces.

Its key advantage over the lever escapement, according to the two watchmakers, lies in the highly efficient method with which energy is transmitted from the mainspring to the balance wheel. Simply put, the standard lever escapement achieves this final delivery of energy in a long sliding or "pulling" action, while the co-axial achieves its delivery by a simple "pushing" action, "similar to the motion used to impel a gate or door to swing open," Smith says.

This important difference in the way energy is transmitted means that the co-axial escapement is unaffected by any deterioration in the condition of an applied lubricant, whereas the lever escapement's proper function is totally reliant upon the quality and type of lubricant used.

THE WATCH

The appearance of this new 40-mm rose gold timepiece will be very similar to the 68-mm pocket watch that Daniels created in 1994 and which he continues to retain in his own collection.

Beside the obvious, a unique element of Daniels's pocket watches was that he made the cases himself—confirmed by the "GD" hallmark found on them. The new wristwatches will also be marked with "GD," though they will not be made by the 84-year-old legend's own hand.

"George has given us permission to

use his hallmark, and we will be making the cases to his design, standard, and specification," Smith explains.

The dial, like the original pocket watch, comprises hand-guilloché solid silver embellished with inlaid 18-karat rose gold chapters. The matching rose gold hands have the signature Daniels shape. One major difference between the movements of the two will be the absence of the four-minute tourbillon and the chronograph in the new wristwatch. The new wristwatch's manually wound, English-style movement, finished in frosted gold-plate to Daniels's exacting standards, will display hours, minutes, and seconds. It will also contain a calendar and an "up-and-down" mechanism (power reserve display). Of course, its escapement will be co-axial with a free-sprung balance.

The watch will be delivered with both black and tan-colored alligator skin straps and an 18-karat rose gold buckle also hallmarked in London with "GD."

The rose gold edition is limited to thirty-five pieces, individually numbered from 1 to 35. Additionally, Smith offers four sets of four watches containing one each in yellow, red, and white gold as well as platinum. These will be separately numbered and manufactured only on request.

Smith expects his workshop to be able to complete the series in five years, with the first deliveries slated for the end of 2011.

Daniels's tourbillon chronograph pocket watch from 1994 inspired the new wristwatch.
Photo: Sotheby's

