

“The Birth of Artemis”



A custom butcher style chef's knife by Jay Fisher

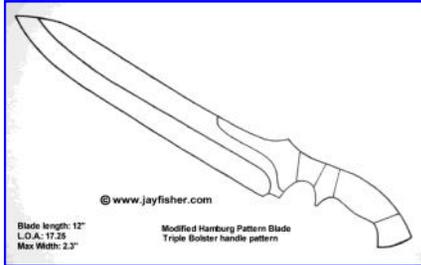
“The Birth of Artemis” chronicles a masterpiece of metallurgy designed and forged by Master Knife Maker Jay Fisher by commission for Master Craftsman Eric M. Saperstein. Eric, skilled in furniture making, woodcarving, and antique restoration, provides an anecdotal account of the creative and technical processes executed to conceive and create the knife that came to be known as “Artemis.”

An Article by Eric M. Saperstein

August, 2009

THE BIRTH OF ARTEMIS

Around May of 2007 Eric decided to indulge one of his crazy ideas, this time it was to find the ultimate chef's knife. Those of you who know how this process generally ends, already anticipate that something extraordinary is about to be born. Google is the obvious starting point for Eric's generation, and so the search began with a series of queries to find a knife maker with the appropriate skills and personality to achieve his objective. In only a few hours www.jayfisher.com was providing the majority of the right results. Jay's tendency for robust honesty in the presentation of his work, his obvious masters level skills, and a mindset paralleling Eric's obviously warranted further research.



Within a few weeks of email discussions with New Mexico knife maker [Jay Fisher](http://www.jayfisher.com), the technical specifications and initial design concepts were established. They defined what we can very confidently claim is the ultimate chef's knife. Jay's life has been focused on the art of knife making and metal sculpture since he was nineteen when he first began his quest to learn the secrets of steel; this is the man for the job!

Jay's knives range from work horses, to collector's pieces, military combat knives to high art sculpture. Boasting a piece in the Tower of London, his clients include collectors, police, bomb squads, and the military. His knives withstand combat with the US Army, 101st Airborne, Special Forces, and United States Air Force Pararescue; serve with SWAT and emergency response teams; go on safari with hunters and trappers; and cook with chefs around the world.

The overall length of 18" provides for a full twelve-inch edge. The blade style is a modified Hamburg pattern butcher, with an extended front bolster positioned so a pinch around the spine area between the fingertips allows greater dexterity for lighter work. A light curve in the straight section of the blade provides for even sharpening and improved capability for the severing of fibers. The sub-hilt center bolster adds a nice touch, and the front finger groove is very deep for security. A heavy rear bolster will help balance the beast, a thumb rise provides for pushing, and a slightly canted angle on the handle for comfort complete the concept.



"Artemis," ©1976 photo by Robert Avalon

The design and file work specs were all in place so the next decision was to finalize the selection of steel and the material for the handle. CPM S30V is a martensitic stainless steel; a "designed steel," blending the best characteristics of toughness, wear and corrosion resistance. Designing steel for the formation of vanadium carbides develops a harder and more effective structure than chromium carbides, superior in wear and rust resistance. Those familiar with stainless steel such as 440C and D2 are aware of the benefits and the weaknesses of these alloys. CPM S30V is designed to overcome faults of these materials while maintaining and even improving upon the benefits. The steel we selected for Eric's chef's knife is a homogeneous, high quality steel characterized by superior dimensional stability, grindability, and toughness which is best finished in a satin or bead blasted surface. Literally born in a crucible, this steel is the unquestioned state of the art in modern metallurgy. ([Jay's Blades & Steel Page](#))

This is a prototype, illustrating the application of Jay's lifetime of skills to forge the most modern of steels into a true functional work of art. As the blank yielded to his will and the blades form emerged, Jay designated Eric's knife "Artemis." Having already exchanged stories and backgrounds. (Anyone notice Eric babbles?) Jay already understood the destiny of this knife would include preparation of an array of wild game. Artemis is the goddess of the hunt and of all wild animals, she roamed the wilderness, forests, and uncultivated land, with her nymphs in attendance, hunting for lions, panthers, hinds, and stags.



Article By Eric M. Saperstein of Artisans of the Valley

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Artemis was created by Jay Fisher of Enchanted Spirits Studio Clovis, NM www.jayfisher.com All Image Rights Reserved



We now have a blade, ready to undergo the hardening process. Shown left, the tempering process is never complete without a final test. Hardness testing utilizes a diamond stylus to penetrate the blade, under 330lbs with a secondary 150kg load applied Artemis tallied up with a 59HRC. All that technical babble translates into one extremely tough and durable piece of metal.



So, now what? A knife blade is only one piece of the puzzle, bolsters are another group of pieces and mounting them comes next. "Bolsters do exactly that, they bolster the blade's strength in the critical areas: the handle to blade junction, and the rear or butt of the knife where heavy blows or impact require reinforcement. The bolsters also help to protect and mechanically secure the handle." - [Jay's Knife Anatomy Page](#).



Artemis's bolsters are mounted using a process where zero clearance 304 stainless steel pins are driven through both bolsters and tang, then peened with "vigorous energy and impact" yielding a permanent, rigid assembly of bolsters to knife tang. Shown left, the blade meets its bolsters. Below that Eric's knife is featured with an [assortment of tactical knives](#) that by the time this article releases will likely be in the hands of our soldiers and emergency teams around the world. Jay takes an appropriate pride, and a confident but humble position, when a soldier commissions a knife; a knife that one day his life may depend on.

"The world's elite clandestine rescue and tactical squads seek his weapons. Their lives depend on "Jay Fisher Custom Knives"- the best quality knives in the world." --Bernardo M. Perez Deputy Assistant Director - Ret. FBI Laboratory Washington, D.C.

Handling this beast of a blade raised the next decision and engaged next example of Jay's mastery of materials, he happens to be a lapidary. Very few knife makers use, let alone almost exclusively employ gemstone to craft handles. The material is often misunderstood, even coming as a surprise to Eric as the best choice. Gemstone is simply a term defining rocks we as a species deem as valuable or precious. We justify the basis of value on rarity, each stone being subject to grading by quality of color, inclusions, weight, density, and in cases where translucence is a factor such as with diamonds clarity.

Unlike wood, ivory, bone, or even modern plastics gemstones come with the benefit of being impervious to everything found in the kitchen. Steel and stone are molecularly similar; their common base elements consist of carbon, iron, chromium, magnesium, selenium, silicon, tungsten, molybdenum, phosphorus, among others. This elementary structure allows continuity between handle and blade, resulting in a synergy in thermal coefficient. ([Jay's Gem Handles Page](#))

"The process of making the gem handle is brutal on the stone, and if it's going to break, it's going to happen then. Grinding stone is the most gut-wrenching, nerve-rattling, teeth-chattering experience you would ever want to have, and it takes hours and hours to grind, sand, and polish the stone." Jay Fisher

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OK, yeah so we stole from Jay's site, can you blame us? It sounds really cool, and we couldn't write it better. Translation, a stone handle and a steel blade will expand and contract uniformly, eliminating the strain on the joints common to mismatched materials. Bottom line, it's very unlikely the handle will ever fall off. Chances are the tip of a steel blade will break before a stone handle will ever shatter. Scratching a gemstone requires silicon carbide or diamond, so unless you're planning to smack around a diamond, the handle will remain flawless for generations of use.

Jay's confidence gave no doubt that gemstone is our choice, but that left Eric with over a year to ponder thousands of colors and textures. The final choice is Red River Jasper, a selection that only clarified itself when the blade's shape and scale was realized. Red, the glow of the forge, blood drawn in a hunt, and the shimmering hardwood coals of a hearth; there's a definite continuity.

Shown above, the handle sections are cut from the stone slices and carefully begin to fit into place. Now comes hours and hours of grinding and polishing.

The last remaining design decision was the sheath, or in the case of a twelve-inch blade, let's deem it a scabbard. Wielding this beast may flash us all back to the famous NYC mugging scene of the first Crocodile Dundee movie. *"Sheath: You can bet this special knife would have a stunning sheath, so I created this unique art in leather and skin."* - Jay fisher

Crafted in 9-10 oz. leather shoulder, for durability, and accented with hand-carved with inlay areas to set the burgundy Ostrich Leg skin; Jay used broad, bold pieces of the skin, designed to accentuate the large scale pattern nicely. Jay's attention to detail echo in a profile and belt loop following the form of a hunting bow. The massive belt loop and edge welt are stitched with tough black nylon in a zigzag pattern for great strength and to match the tension bindings on the sheath. The bindings are red suede leather, mounted to hint at Artemis' bow strings, accented with hand-formed copper rings.



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The sheath has a brass snap at the flap, which secures and completely covers the knife handle for protection. Final treatments for this dyed, leather is a lacquer seal. The perfect final touch is a custom matching embroidered and double-stitched cotton-poly blend storage bag for convenient carry and to ensure the sheath remains in pristine shape.

A knife like this is an amazing display of craftsmanship, and although worthy of a pedestal, to worship it in a case to us is a waste an implement literally forged for durability equivalent to its artistic form. Even saving this knife for special occasions would be deprivation, and why should Eric subject himself to that?



Eric's plan, simple, put the knife to daily use. From the day it arrives, its monetary value will be forgotten, he will test it, he will maintain a razor's edge, and he'll proudly subject Artemis to what will give any strict knife collector, any collector, a migraine.

Just a thought ... what if Eric wrote like he speaks? As luck would have it, he does. So let's randomly change directions in the middle of an article, then loop it back to derive a logical conclusion. Can you imagine a time a few hundred years into the future, one night someone wanders the internet, searches the [Wayback Machine](#) and turns up our newsletter? With a little research, and lets hope a large investment, perhaps they will reunite Artemis with one our gothic tables. They could then prepare a great banquet, and cross the paths of two artists long after our ashes return to ashes ... (Or maybe metal shavings and sawdust?) This interlude may seem an oddly nostalgic fantasy of aspiration. Then again, if you think about it, collectors and historians spend lifetimes completing their quests for a complete collection. Those artists that aspire to deliver an ever improving quality and longevity within their work are the ones that provide the objects of desire for future generations.

The legacy of an artist stands through time only when their work survives long enough to reach the hands of furniture generations. Eric, Teri & Stan produce furniture, carvings and sculptures burned with their signatures. When their skills are recognized by a value placed by antique collectors of the 22nd century, their work will have succeed in extending their presence in this world beyond their time. The final product of Jay's labor is likewise far from an ending; Artemis, branded with Jay's mark, is destined to endure through generations. A great chef's knife is not a tool, but more an extension of a chef's hand; Jay's immortality transitions through Artemis into culinary artistry; indulging thousands of pallets by crafting countless feasts.

"It gives me great (if somewhat apprehensive) satisfaction that ninety percent of the pieces I make will still be admired centuries after my bones are dust! They will, however, continue to appreciate in value. Unfortunately, I won't be able to benefit from that"

Jay Fisher

[Jay Fisher - World Class Knife Maker: Featured Custom Knives](#) www.jayfisher.com

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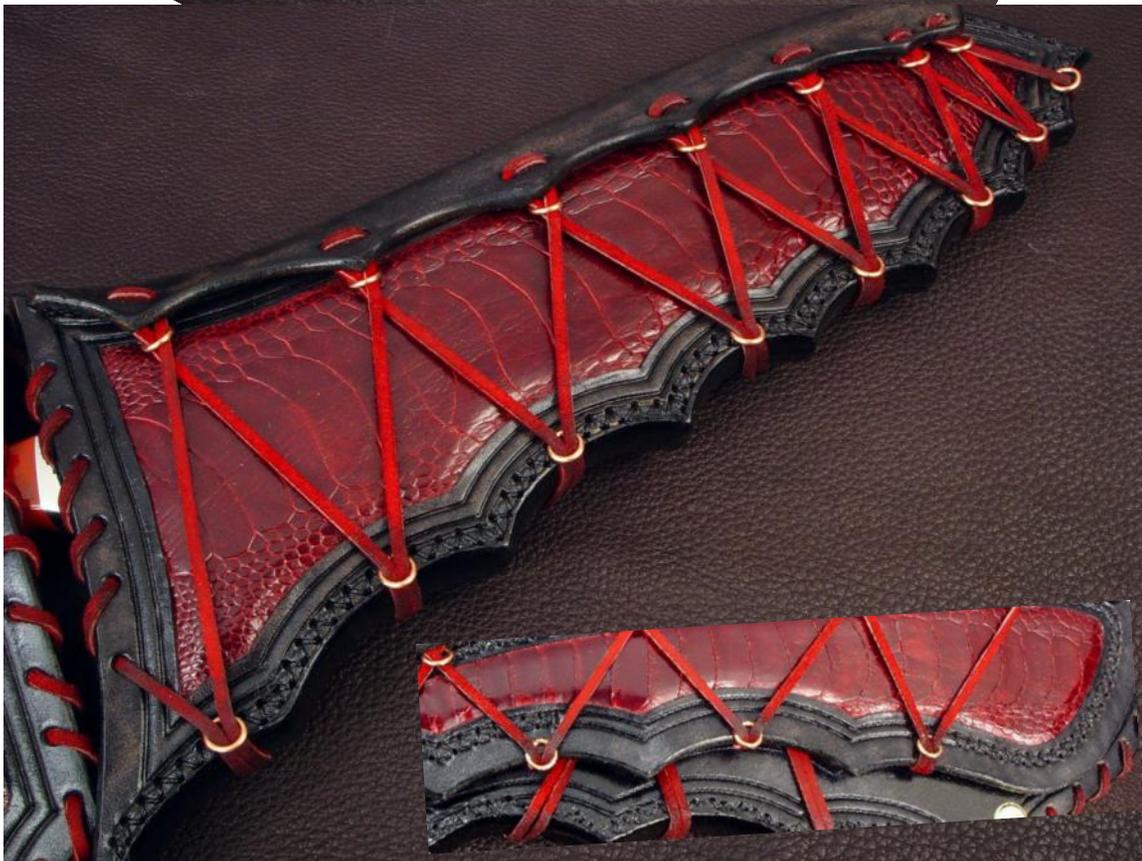
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Photo by Henry Schweber

ABOUT THE AUTHOR

Master Craftsman Eric M. Saperstein (Shown Below) owns and operates Artisans of the Valley, a premier hand crafted custom furniture, woodcarving, and antique restoration studio.

His custom work includes an original line of New Wave Gothic furniture, period reproductions, and wildlife carvings. Each piece is by commission, hand made and signed.

Eric is fully versed in antique and collectable restoration and repair, taking on unique, valuable, and eclectic projects that most modern refinishing shops quickly shy away from.

Visit www.artisansofthevalley.com

[Click Here To View Eric's Profile](#) on Artisan's Website



Photo by Henry Schweber



Photo by Henry Schweber



Photo by Theresa Tonte



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THE BIRTH OF ARTEMIS QUICK BIO: KNIFE MAKER – JAY FISHER



"The best thing about knife making as an art and trade is to hear the stories of what the knives have done, if they've rescued someone from a pinch, saved a soldier's life, or inspired an artistic thought that makes the piece personal, even interactive to those who view, hold, and use my knives, swords, and artwork. Making knives is probably the world's oldest honorable profession, and I'm proud to be a part of it.

My inspiration? Countless knife and weapons makers, warriors, and artists throughout history, who remain faceless but for the conquests and beautiful works they've left behind, as will I." - Jay Fisher

Jay Fisher executes his craft at the Enchanted Spirits Studio in Clovis, MN, producing some of the best knives in the world. Starting his pursuit of metal mastery at age 19, he has spent a lifetime learning the nuances and working characteristics of metal & stone. His legacy will last endure through the pieces he produces, and his skills shall carry on through the hands of his son-in-law James Beauchamp. James has established his commitment and dedication to the art of knife making, providing Jay the opportunity to align with tradition and enrich an apprentice with the secrets of his lifetime.

- We are proud to possess Jay Fisher's "Artemis," and we're equally honored at the opportunity to share this story.

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[Artisans of the Valley](#) offers museum quality period reproductions, original designs by commission, and antique restoration/conservation services, hand carving, modern furniture refinishing, onsite furniture repair, hand made walking sticks, and educational programs. Our website is now over 300 pages, including galleries, feature articles, and educational sections, company background, and our new adventure album section. We extend an open invitation to explore our site, and contact us directly with any inquiries or questions you may have.

Eric M. Saperstein is Master of Artisans, Owner, Webmaster, Editor, Bookkeeper, Buyer, Office Manager, Legal Pit-bull, and he's in charge of vacuuming the shop: eric@artisansofthevalley.com

Theresa Tonte is the Owner of Smooth Finish by Artisans of the Valley. Teri provides onsite touchup & repair services for residential, corporate, and institutional clients as well as serving to fill a variety of roles in the shop including referee: teri@artisansofthevalley.com



Stanley D. Saperstein, Master Craftsmen, Author, & Historian founded Artisans of the Valley in 1973. Stanley offers historic presentations, impressions, and various lecture series ranging from Civil and Revolutionary War, American Folk Art, and Interactive Role Play of Characters ... sometimes trying to reenact American Chopper episodes in the shop: woodcarver@artisansofthevalley.com



RECENT ARTISANS BLOG TOPICS

Artisans of the Valley recently launched a new blog site (www.artisansofthevalley.com/blog) which will serve as our latest venue for articles, discussion topics, artist features, news updates, and tales of our adventures.

[Investment Grade Blades. Tactical Diversity to Your Art Portfolio](#)

[Hardwood Time. Clocks Made Entirely of Wood](#)

[Stanley Saperstein's "Sharpshooters" A Chronicle of the United States Sharpshooters](#)

[The Making of Artisans EBRU-TV Artist Profile](#)

[Stearnsy Bears. Hand Made Custom Teddy Bears](#)

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