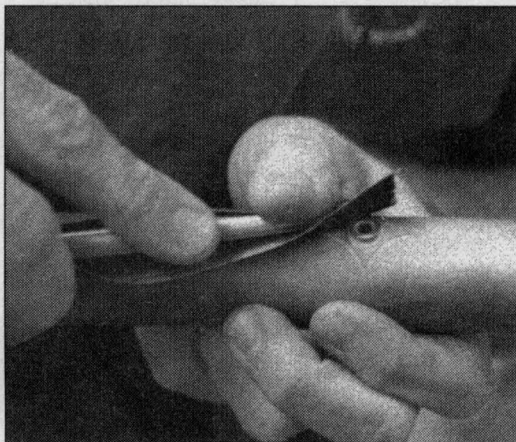


# The Rivendell Frame

Always Steel. Always Lugged.



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The bottle bosses are reinforced with thin, diamond-shaped plates which must be brazed on separately. Here, Joe cleans up the diamonds, making them extra thin and nice-looking.

## ~·SLOW FRAMES·~

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A custom Rivendell bicycle frame requires more than 20 hours to build, and we've a strong hunch there are fewer than ten builders in the country with the skill required to build them. It's unlikely a builder is both good enough and unknown; the top crafters in any field don't stay invisible for long. We've got two of the builders—Joe Starck and Curt Goodrich. We know of seven others, maybe we're overlooking one...and that makes ten.

One thing that makes Rivendells challenging is that we're particular about the location and radius of the bend in the fork (the fork rake). This is purely an aesthetic matter. We like the look of a bend that starts low and continues, without straightening, all the way to the dropout. Creating such a bend required custom maple bending blocks, and each blade has to be raked individually, using a simple lever tool that wouldn't raise an eyebrow if it time-traveled back to the 15th century.

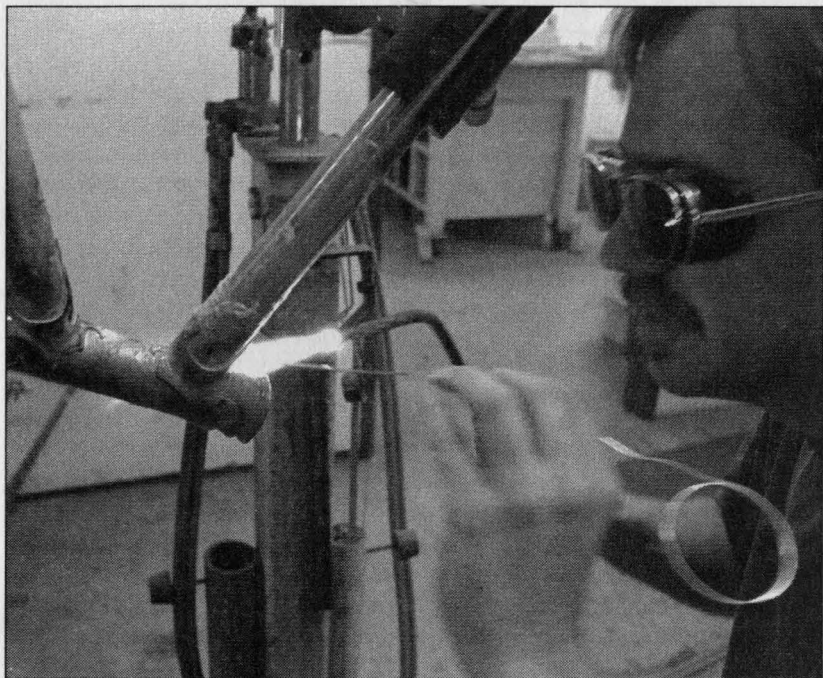
On frames designed for sidepull brakes, we're particular about the length of the fork blades and location of the rear brake bridge. If the fork is too short or the bridge too low, tire and fender clearance are compromised. If they're too high, the brake pads rub the tire. The best location for the brake pads is at the bottom of the slot, but aiming for that location is risky, and hitting it every time requires extraordinary precision and consistency. Most frames, consequently, aim for a mid-slot placement.

These are two of twenty-five details that define a Rivendell. Some affect function, some affect aesthetics, and some affect strength. As beautiful as a Rivendell is on the surface, its real beauty is beneath the paint.

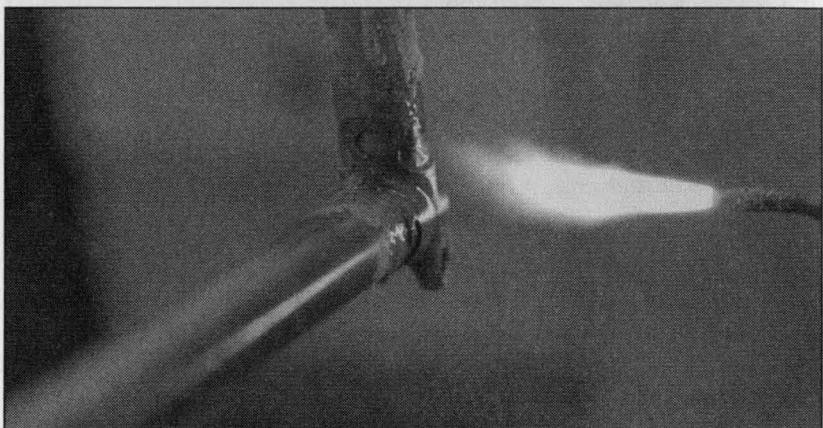
The finest frames from the past were not made this well. If you remove the romance associated with those names and those times and strip off their paint and decals and head badges, you'll have a pile of fine frames that still fall short. As time has passed, materials and methods have improved, and the bar has been raised.

Rivendell frame standards are impracticably and impractically high, but our frames are not a nostalgic, modern classics. We use traditional materials and methods, no matter how costly or slow, when they work the best. But the best result means using the best of everything. The tubes are cut (coped) by machines rather than by hand with a file, because machine coping is more precise. This is nothing to apologize for, but to point out as a matter of fact. There is an inordinate amount of hand labor in a Rivendell, and there always will be, but none is gratuitous. We use the best method to achieve the result we want—the most precise, the highest integrity, and the most beautiful.

A Rivendell frame builds up into a bike you will bond with immediately and ride for the rest of your life. A bike you'll love even more whenever a new gimmick or technology grabs the headlines and promises more speed, more victories, more glamour.



Brazing the top head lug. The right hand holds the torch and directs the heat, the left hand holds the silver brazing rod, which turns molten and gets sucked into the joint by capillary action. When it cools, the joint is effectively glued with metal. The lug adds material, strength, and rigidity to the joint; and looks good.



Warming the seat lug, getting it ready for brazing. The pasty stuff is flux, which protects the tube from the flame and creates a proper environment for brazing. Fluxing the joints is another time-consuming part of building lugged frames.



## ~·LUGGED STEEL STILL·~

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- For the past 10 years lugged steel bicycle frames have been getting increasingly scarce, victims of manufacturing economics and a shortage of builders with good brazing skills. Now lugged steel frames are as rare as arrowheads in a Yosemite campground, and new cyclists don't give them a second thought •

What a change from just 20 years ago! And all the years before. Back then, Reynolds and Columbus steel tubing were the materials of choice, lugs were a given on all but the cheapest frames, and joining one tube directly to another by melting them both (tig-welding) was unacceptable on a high quality frame. Bike shops wouldn't sell them.

The first tig-welded frame to break the bike shop barrier (where better bikes are sold) was the Specialized Stumpjumper, about 1981. The market was so hot for an affordable mountain bike that riders overlooked the welds and bought them anyway. More tig-welded frames followed, and over the past 20 years, tig welding has proven its reliability. As the cycling market is increasingly populated with new riders unfamiliar with traditional methods and styles, the acceptance of tig-welding is complete. It is progress of a different kind.

Now it's 2001, and even the most revered names from Europe and many in the United States — makers who built their reputation on lugged steel — are now offering frames that fly in the face of the style that won them that reputation. It used to mean something to say "I have a Colnago" or "My bike's a Tomassini" (or Masi, or DeRosa). These days that doesn't even identify the material. Fork crowns have disappeared, forks are straight, steel frames get molded carbon fiber forks, tube dimensions are over manipulated, and many expensive frames look like they take longer to paint than to build. At the bicycle expo in Milano, you'll see leopard-skin-spotted monocoque carbon frames with "classic" Italian decals. It's a clash of worlds and ideals.

In most of the hallowed frame shops in Europe, the founders have burned out, sold out, or undergone a late-life crisis, and a business that once seemed bubbling over with conviction and passion is now controlled by new blood and ideas that kow-tow to profitability and market trends at the cost of its heritage. As the high end market has changed from educated to impressionable, manufacturers have responded by dropping the traditional materials, methods, and design elements that defined them, to build bikes cheaper and faster, often under the banner of "high tech."

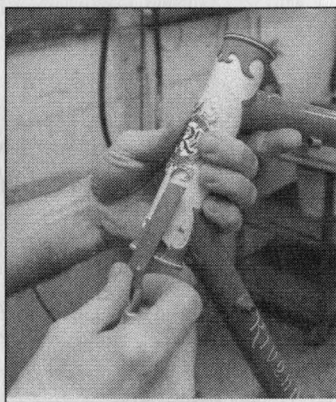
One change that's happening in the manufacture of "pro" bikes is the pre-fab model, in which Company A makes the rear half, Company B makes the fork, and they're shipped to Company C, the manufacturer of record, where the fork and rear triangle are assembled to the main frame. Certain efficiencies are achieved, but they are achieved only by accepting compromises in frame designs, steering geometries, and traditional frame-making processes.

Another cutting edge bike is the so-called "stage" bike, made so light and so thin, it is intended to be ridden in one stage of a long professional race, and then retired. Given the influence that racers have on modern cycling equipment, and the tendency for user bikes to mimic race bikes, the prospects for trickledown seem scary.

SOMETIMES PEOPLE LOOK AT RIVENDELLS and instantly dub them "retro." But they *aren't*. Retro is forced style for nostalgia's sake, like cork-topped metal water bottles, wooden rims, and Cinelli M-71 pedals. There's nothing wrong with that in its own context, but we make bicycles for riders. We can't emphasize this enough. The details that look "retro" just happen to be strong, attractive, and practical. Our lugs are stylish, but they're also smart. The broad spoons in the stressed areas eliminate stress, the extensions allow you to get the handlebars into a higher, more comfortable zone, and the reinforcing rims prevent ovalized head tubes.

A Rivendell frame and fork and headset, painted and prepped takes about a year to get, and costs \$2,200 to \$2,300. It weighs between 4 and 5 1/2 pounds, and the fork, 1 1/4 to 2 pounds, depending on the size, choice of tubing, and braze-ons. A complete bike usually costs from \$3,400 to \$3,700, and weighs 20 to 25 1/4 pounds.

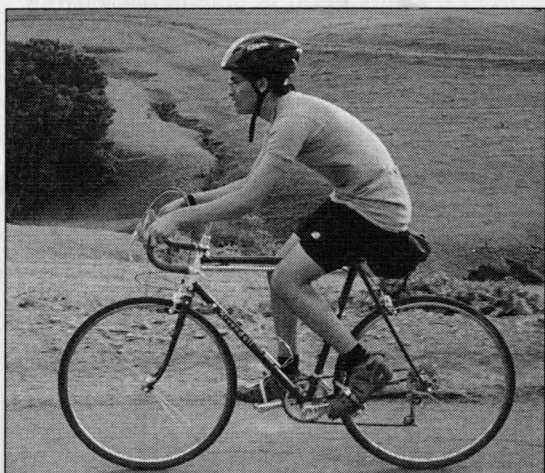
You can go to a local bike shop tomorrow and walk out with a bike that weighs less and costs one third as much. That's why those bikes outsell Rivendells 9,000 to 1. But if you like well thought-out design, tradition, craftsmanship, and the idea of riding and growing old with the best bicycle it is humanly possible to make, then a Rivendell frame is a clear and smart choice.



A 2mm thick head badge made of enameled copper, is screwed to the head tube in just the right spot. Joe attaches every one.



Blurry Joe about to braze a head tube joint.



## ~·A BETTER WAY TO SIT·~

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The road bike, for the most part, has devolved into a high tech, uncomfortable machine, and the proof is all around us. Look through any bike magazine or catalogue and you'll see saddles up to 6 inches higher than the handlebars. It is impossible to be comfortable on such a bike. It forces you to lean forward, putting more weight on your genitals, hands, and arms, and strains your back. The lower part of the drops are out of reach. People ride these bikes with straight, locked-out arms and wake up with aching backs.

When we custom design a bike for you, you'll be able to get a position similar to the one in the photograph up there. The rider's back is between 45 and 50 degrees, there's a noticeable bend in the arms, and most importantly, his arms aren't supporting his body weight. He doesn't have to look up to look ahead, because he's not hunched over and low. And see how high the lower portion of the drop bars are, relative to the top tube? That means they're more accessible for riding on the flats, or even for short climbs. You've been told *don't climb on the drops*, but if we fit and size you on one of our bikes, climbing on the drops is a totally different experience. You'll still be on the tops during sustained climbs, but on short rollers, the higher drops on a Rivendell are a reasonable option.

Such a position requires a level or slightly upward slope between the saddle and the handlebars. We consider this when we design and build your custom frame.



## ~·COMFORT BY DESIGN·~

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When comfort is the goal, riding position is just about the only thing that matters. It's more important than frame material, tube dimensions, and frame geometry combined. It's more important than clothing and tires, too. Riding position is King, Pope, Earl, and Viceroy all in one, and if you don't have it, your bike may be tolerable, more comfortable than your last bike, and you may become used to it, but it won't feel like a sofa. For that, you need a good riding position, and that begins with a good design for your body. Following are our beliefs about riding position and comfort.

**ARMS, HANDS, AND BACK.** With drop bars, when you ride with your hands just behind the brake hoods, your back should be angled about 45 to 50 degrees to horizontal. Your elbow should be noticeably bent, with your lower arm between 10 & 50 degrees to horizontal. Your hands should rest lightly on the bars.

**SEAT, FEET AND LEGS.** For most riders, a more rearward sitting and pedaling position works well. Despite the longtime wholesale acceptance of setting up your bike so that your knee is directly above the pedal axle, there's no physiological basis for doing so. The fastest sprinters pedal way more forward than that. The fastest climbers pedal way more rearward. "Knee over pedal spindle" holds no water. Sitting back, you carry more weight on your rear end (which is designed to carry weight, after all), and less on your hands. And the rearward position affects pedaling in a couple of ways.

- ~ As you push down on the pedal, you're actually pushing a little forward, too, which helps you maintain your rearward position (and takes weight off your hands).
- ~ You catch the pedal going over the top sooner, so you can start applying power earlier in the stroke. This is particularly good for climbing, and is why even pro racers do it (sit back farther) on mountain stages.

But a rearward position tends to bend you more at the waist. So, to open up that bend, raise the handlebars. Raising the bars also takes weight off your hands and improves descending, since it helps keep the rear wheel weighted and your weight centered. High bars work better, too, because they make any hill seem less steep. With low bars, you feel like you're going downhill even when the road is flat!

### MAKE YOUR BODY SPRING-LIKE

Relaxed arms react to bumps, flexing and absorbing the shock before it gets to your neck/back/body. Picture the springlike movement of a jockey on a racehorse. Ignore the leaned over position, but notice how his relaxed appendages soak up the blows so his body doesn't. The key to a relaxed body is a good position, and that starts with a good frame design for your body.

### BE CAREFUL WHO YOU EMULATE

Sizing, fitting, and positioning systems based on the young pro cyclist who has a flexible, tolerant body, is willing to sacrifice comfort for speed, gets a massage frequently, and usually quits riding when he turns 32...are not suitable for a non-competitive cyclist seeking a lifetime of cycling health and pleasure.

### SADDLE HEIGHT RELATIVE TO THE HANDLEBAR HEIGHT

This is the most important relationship on the bike. On most bikes, the handlebars are much lower than the saddle, which leads to stress and pain in your hands, arms, shoulders, neck, and lower back. The too-low handlebars are due to design and fitting issues involving the stem, headset, head tube, steer tube, top tube, and frame size (seat tube length). The bad position is further encouraged by modern approaches to fit that steer you toward the smallest bike possible. Bikes such as these shift your weight forward, where it doesn't belong.

For most riders, maximum comfort is achieved when the handlebars are level with or up to 5cm/2-inches *higher* than the saddle. Few riders have ever experienced this, and few bike shops espouse such a bar-to-saddle relationship. It would serve no useful purpose, because this position is impossible to achieve on most production bikes. But the comfort has to be experienced to be believed. The weight on your hands is reduced. Your back doesn't suffer as much. You can see around without holding your neck up. And steep descents don't feel as steep, because your body is more upright. We design your frame with this in mind.

If a main criterion of comfort is getting the handlebars higher, then an obvious way to do that is to start with a larger frame. But as you might expect, it's not so easy. When you *upsized* with normal production frames, though, you run into problems. They are designed with a *downsize* mentality; which results in a short seat tube and a long top tube. When you go to a bigger frame, the top tube is usually too long.

Our approach to frame design and fitting is unique among all bike makers, and results in a more comfortable riding position. If you can't get comfortable on a Rivendell, it's time to get a recumbent.

## ~·STRENGTH·~

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Steel has proven itself as a bicycle frame material for more than 140 years, and the best modern steels are phenomenal. They're strong, tough, ductile, and consistent in their dimensions and quality.

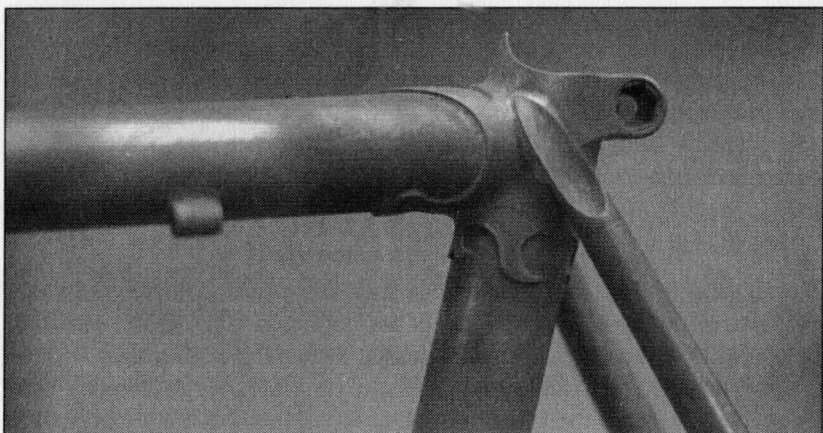
We use premium quality tubes from Reynolds, True Temper, and Dedacciai. Many of the tubes we use are made to our specifications. In general, we don't push the limits of lightweight steel tubing, because we build these frames to be keepers. But, by the nature of modern steels and metallurgy, the frames end up being plenty light.

We select each tube on your frame according to how and where you'll ride it, and your personal preferences (stiff or limber).

The joints are lugged and brazed, and are designed to eliminate stress risers which can lead to premature fatigue. There are other strong ways to join frame tubes, but lugs are still the best. Although they're far more labor-intensive than the other methods, brazed, lugged frames have certain undeniable advantages.

- The parent tube is not melted, and therefore its inherent properties are less affected by heat.
- If a tube ever gets wrecked in an accident, it can be replaced relatively easily, and the frame made good as new.
- Lugs increase a frame's strength by effectively being external reinforcements at the joints.

Some modern steels (Reynolds 853 and True Temper OX Platinum) are "heat-loving," in the sense that they actually get stronger when exposed to high temperatures. We use these tubes when they're appropriate, but the overall strength of the frame, while obviously important, isn't determined solely by the strength of the tubes in it. Proper material handling and brazing technique are equally important, and when combined with the best tubes, the frame is strong.



A Rivendell seat lug and double-tapered seat stays. The seat stay plugs shown on this road frame are our own design. They're light, beautiful, accurately cast, and offer tremendous contact area for strong, lifetime joints.

## ·BEAUTY·

- A Rivendell frame has a balanced, subtle beauty, achieved by round frame tubes and classical proportions and styling. There are no criss-crossed or interrupted tubes, no gussets, no revolutionary bracing. The paint is the best quality (Joe Bell), and the paint style and overall graphics are understated, so that from across the street or passing by you on the road, a Rivendell looks plain. But the beauty is there when you look for it •

All Rivendell custom frames come with the lug windows painted cream, to match the cream fill in the decals. We also offer cream head tubes, our most popular option (a "standard" paint job includes this). In our fancy paint jobs, the seat- and chainstay bridges and front dropout edges get creamed, too. It's almost too much, but not quite.

The lugs and fork crowns and bottom bracket shells are all nice looking. The tube-to-dropout transitions are smooth, graceful, and natural. The lower curve in the fork blades is continuous. Seat and chainstay bridges and bottle cage bosses are reinforced with ornamental diamond-shaped stampings. In the early '70s when it became popular to drill holes for direct-mounting bottle cages, it was reasonably thought that unreinforced holes in the tube would lead to tube

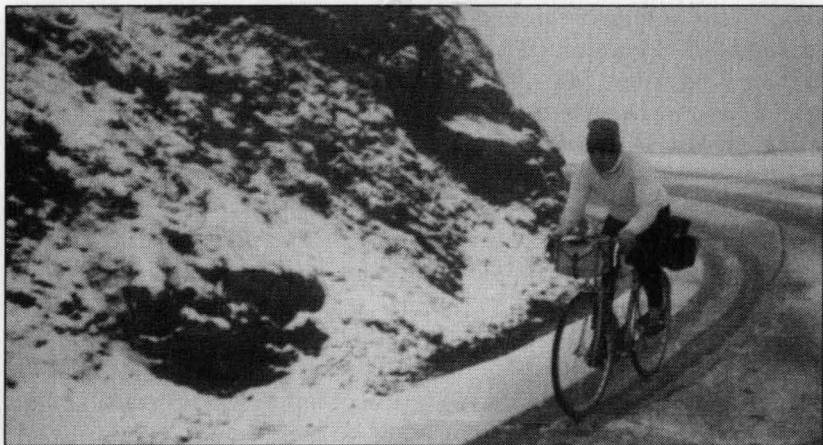


failure; and reinforcements came in a variety of shapes. We've since learned that unreinforced holes in unstressed areas of the tube don't threaten the tube, but on Rivendells we continue to reinforce the holes, because we like the look and the original sentiment. You can't opt out and save \$25, because without the bottle boss reinforcements, it wouldn't be a Rivendell.

Most of us have heard the expression, "form follows function," which dictates that you make it work first, and if it works, it must look good. That's not always so. Nature can get away with rough beauty in a bristlecone pine, but in a bike frame of the highest quality that you plan to ride for the rest of your life, the extra five to twenty minutes that goes into making a joint look nice, or tapering a lug edge, is time well spent and worth paying for.



Curt brazing a Rivendell head tube. The ornamental waves and curls, add nothing structurally, but look nice. The head lugs have reinforcing flares which add metal to the thin head tube, preventing ovalization due to hard riding or a caveman mechanic doing a bad job pressing in your headset. Our head tubes are more resistant to ovalizing than are oversized head tubes, and they allow familiar, good-looking, classical proportions, as well.



This is a Rivendell road bike, equipped with sidepull brakes, fenders, and 700x35 tires. It is rideable in all year around, and is at home on roads and fire trails.

## ~·VERSATILITY·~

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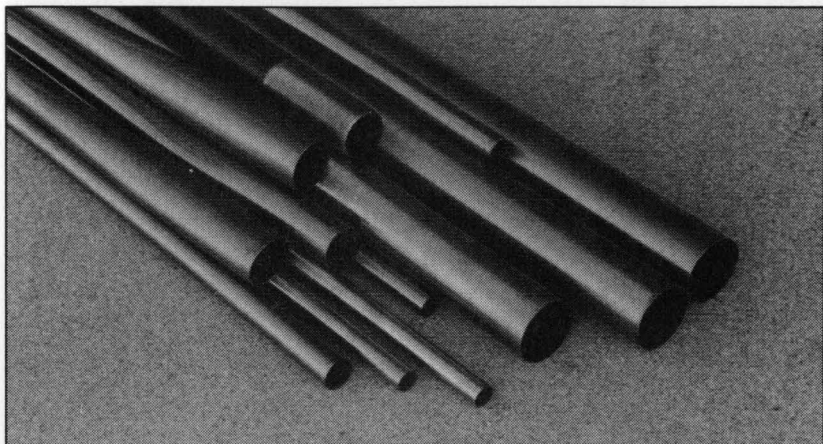
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A custom Rivendell will be ideal for whatever type of riding you plan to do mostly; but it will perform well outside that range, too.

If you buy a light road bike for fitness rides and equip it with short reach sidepull brakes, it will have enough clearance for tires up to 700x35—which means you can ride it on graded trails, bad roads, and carry on it enough baggage for an overnight trip.

If your frame is designed for day touring, your bike will be light enough to feel zippy with light wheels, and will have even more clearances for fenders and fatter tires, so you'll feel comfortable on most multi-day tours, and many trails. If you're buying a loaded touring bike, it will handle great unloaded as well.

Ordinarily, "versatility" means a compromise, but here it means smart design. For instance, on Rivendell road frames designed for short reach sidepulls, we maximize the clearance by making the fork blades longer than most, and placing the brake bridge higher. The brake shoes rest at the bottom of the caliper arm slot, which is key to maximizing fender and tire clearance. We can think of no other short reach sidepull-compatible frame that can accept a 700x35 tire. You may not need that right now, but sometime in the next 20 years or so you might, and your bike will be ready for it.



We use the best tubing from England, Italy, and America. About half the tubes are made to our specifications, and all are inspected before brazing.

## ·FRAME TUBING·

We use only premium quality tubes, and many are made to our specifications. A typical frame has a mix of Reynolds and True Temper tubing; and Dedacciai makes a few tubes we like, as well. The seat tubes, down tubes, top tubes, chain stays, and seat stays are heat-treated for extra strength, and the fork blades are either Reynolds 531 or True Temper CrMo.

Most of the strongest steel alloys are available in super-thin wall thicknesses. The makers draw the tubes to unworldly thinnesses so they can compete with titanium and aluminum in weight. Most of the steel makers realize the folly in it, but shrug and say, "Hey, it's a nutty world out there, we gotta do this."

We choose these same super alloys with slightly thicker walls. On a frame where most builders would spec a 0.7mm x 0.4mm x 0.7mm tube, we'll go with an 0.8mm x 0.5mm x 0.8mm; sometimes even a 0.9mm x 0.6mm x 0.9mm. The tube is still less than a millimeter thick at its butted ends, and the weight difference is only 3 to 6 ounces in a typical frame, but it is 10 to 15 percent stronger and more fatigue resistant, so the extra few ounces are a tremendous bargain. It won't slow you down, it'll just make the bike better and last longer.



We use only forged steel dropouts, the toughest kind. We have several models with different geometries and details, to accommodate any frame we might be building.

## FORGED STEEL DROPOUTS.

Forging is an old process in which metal is smashed into shape by a bigger piece of metal, usually a hammer or a forging die. There is "cold-forging" and "hot-forging," the main difference being the amount of heat applied to the piece to be forged during the smashing process. The image you may have in your head of a blacksmith forging horseshoes is an example of hot-forging.

Forging imparts a grain to the metal. Grain in metal, like grain in wood, follows the contour of the piece, so it's strong in all directions. Whenever forging is an option, it is always the strongest way.

Dropouts live a tough life, but forged steel ones can withstand incredible stresses, and even abuse, as the ones in the bottom photo of the next page show. They were clamped in a vise, pried with a long lever, and pounded hard with a hammer to get them to twist so much out of shape. Dropouts made of any other material or method (other than forged steel) wouldn't have survived such ridiculous abuse.





Joe Starck brazing a right rear dropout into the chainstay.



Two twisted dropouts, a rear (left) and a front. These were clamped in a vise, bent with a lever, and then beaten with a hammer. If you straightened them out, they could be brazed into tubes, and would likely last another 25,000 miles. But it won't be given the chance to prove it on *your* frame.



A sampling of mostly proprietary (ours alone) lugs, fork crowns, and bottom bracket shells. The crowns at 2 and 9 o'clock are stock items that made the cut.

## ~·INVESTMENT CASTINGS·~

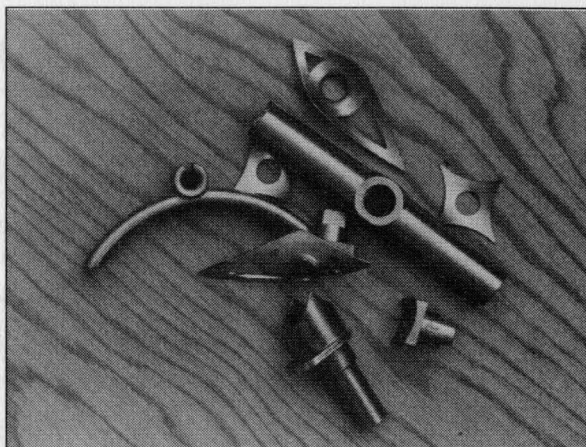
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Investment casting, also known lost wax casting, is the best way to make consistent, precise, intricate things out of metal. It was invented roughly 10 thousand years ago. Some say it started in China, some say Egypt. If indeed it was the Egyptians, they sure dropped the ball in the ensuing millennia, as evidenced by the fact that you can't even buy Egyptian investment castings today. But Taiwan (Republic of China) is a world leader in the field.

Investment casting is a simple and clever process that starts with a wax mold of the part to be cast. This mold is then dipped into a ceramic batter, the batter is allowed to dry, and the dipping-and-drying is repeated several times, until a thick batter crust encompasses the mold. Then the batter-covered, encased wax mold is heated, and the wax melts out of the mold, leaving a clean, smooth cavity. Molten metal (steel, in the case of our castings) is then poured into the cavity, and allowed to cool and dry. Then the crusty batter is broken off, leaving a fresh lug, fork crown, or bottom bracket shell.

Investment castings vary in quality. Ours are made in Taiwan by a company called Long Shen, whose ability to turn out consistently crisp, detailed, strong investment castings, is legendary in the bike industry.



## ~·BRAZE-ONS·~

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In the '70s the scuttlebutt was that braze-ons, along with the right tubing sticker, were a sign of a quality frame. Bad frames never had braze-ons, while fine frames often did. But braze-ons add convenience, not quality, and we feel that the gratuitous use of them clutters up and detracts from a fine frame. On Rivendells, each braze-on earns its spot. Standard braze-ons include:

- ~ Top tube cable guides. Split for easy maintenance, and located at roughly 7:30 on the clock (left side from rider's view).
- ~ Rear derailleur cable stop, under the chainstay.
- ~ Two eyelets on the rear dropout (one for fender, one for rack). Single eyelet on the front. Other combinations available on request. We have forms you fill out to specify braze-ons.
- ~ All frames get downtube shifter bosses. They're a more solid attachment than standard cable stops here.
- ~ Two water bottle bosses. A third may be added, and we have forms on which you specify this.

There are some braze-ons that, because of style or philosophical issues we don't do (internal cable routing, front derailleur braze-ons), but we offer all the ones we feel are practical and well-suited to the type of frame you're buying. For braze-ons beyond the standard complement, there are slight upcharges.

## ~·STEEL FACTS·~

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If you were to list every desirable quality for a bicycle frame material your list would look something like this:

**TOUGH**, so it resists cracks, and if a crack develops, it grows slowly and give plenty of warning before it becomes dangerous;

**STRONG**, so it can withstand the abuse of carrying a 240lb. cyclist for years to come, over all kinds of surfaces;

**DUCTILE**, so it can withstand repeated flexing without fatigue;

**BUILDER-FRIENDLY**, so you don't just have a pile of textbook tubes that resist fabrication. Steel is also the most easy frame material to repair.

**PROVEN**, so you can ride it with a certain amount of empirical-based confidence;

**GOOD DAMPING**, so, when your ride over a bump, the vibration stops quickly;

**LIGHT WEIGHT**, because heavy bikes are harder to pedal up hills;

**CORROSION PROOF**, since corrosion can kill metals; and

**REPAIRABLE**, because good things should be able to recover from bad accidents.

It's a 9-item list, and steel comes out on top in 7 of them. The only places it doesn't are weight and corrosion resistance.

The campaign to sell light weight relies heavily on the misleading practice of comparing frame weights and converting the difference to a percentage—this frame is 30 percent lighter than that one, and so on. Consider: A 2.8-pound carbon fiber frame is 35 percent lighter than a 4.25-pound steel frame. That 35 percent sounds like a lot, but you can't ride a frame. Add 17 pounds of parts to each frame to make them bikes, and now the difference (21.25lb vs 19.8lb) shrinks to 7 percent. But what's a bike without a rider? Add a 170 lb rider, and now the difference (191.25lb vs 189.8 pounds) is just three quarters of one percent—and you give up longevity to get it.

As for corrosion resistance—well, steel rusts. That's why you paint it on the outside and spray it on the inside. The occasional chip and scratch that goes down to bare metal is no threat. An old frame without these signs of use is pitiful, it has no stories. Cover minor chips or scratches with touch up paint, nail polish, and don't even be fanatical about the job you do. And for the inside of the tube, just spray it with FrameSaver or Boeshield T-9. Even without the spray, a steel frame made of reasonable tubing and ridden on the saltiest roads on earth will probably last 20 years. With the sprays, you can relax. Spraying is easy.

Consider the whole package—how the frame was made and who made it, aesthetics, and the care and thought that went into it. Pick a frame that matches your artistic values, your sensibilities, and your personality.



## ~·FRAMESET, OR COMPLETE BIKE?·~

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We can deliver either one. If you already have the parts, or if the parts you want to equip your new Rivendell with aren't the parts we offer in our catalogue, then it makes sense to get the frameset alone. It comes with a headset, so you won't need to buy one. Rivendells take standard parts, nothing odd about them. Some of the dimensions you'll need to know are:

- ~ **Seat post diameter:** 27.2mm
- ~ **Bottom bracket spec:** 68mm, English
- ~ **Rear spacing (for the rear hub):** To order. Typically, road frames are spaced 130mm; Touring and All-Rounder style frames are 135mm.
- ~ **Front derailleur style and size:** Clamp-on, 28.6mm (1 1/8 inch)

Complete bikes are equipped with parts from our catalogue. When you order a frame, we send you a series of mailings which include all the information and guidance you need to select the parts for your complete Rivendell bicycle. You can expect a complete bike to cost between \$3,300 and \$3,700, depending on how you equip it.

### INTERESTED?

## ~·GET OUR ORDER PACKET·~

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It has more information on the process, and tells you what to expect during the wait for your frame. To request it ...

**BY PHONE:** (925) 933-7304

**BY FAX:** (925) 933-7305 or toll-free in the U.S. 1 (UPS) COW-LUGS

**BY MAIL:** RBW Frames, 2040 North Main #19, Walnut Creek, CA 94596

**ON LINE:** [www.rivendellbicycles.com](http://www.rivendellbicycles.com). In the Frames section.

As of August, 2001, the wait for a frame is between 9 and 12 months, approximately. Any number of things from illness to vacation to supply may cause delays. We also offer "cuts" to riders who are 55 years old or older. Yes, you have to supply proof!

## ←·BUILDER PROFILES; AND THE DESIGNER·→

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We are lucky to have two of the best lugged, steel frame builders in the world building exclusively for us. A few notes about them follow, and you can read lengthy interviews with both of them on our website or in back issues of the *Rivendell Reader*.

**Curt Goodrich** is 34, married, and father to 2-year old Mae. He lives and builds our frames in Minneapolis, and works alone. He has been building frames for 10 years—a relatively short time for one with such skill—but in that time has built more than 1,000 frames. A few years ago, Curt worked for the Match Bicycle Company, where he honed his already sharp skills building a large portion of the 750+ Paramounts Schwinn had contracted Match to build. While he was at Match, he also built more than 50 Rivendells. Then Match folded, Curt and his wife and baby retreated back home to Minneapolis, and he's built for us full-time since. Curt is dedicated to lugged frames, and hopes to build them for the rest of his life.

**Joe Starck** is 41 and grew up in Wisconsin, home of Trek, and in the early '80s was brazing up to 40 half-frames (main triangle) per day for Trek. The sheer volume and repetition brought his skill to the point where he was offered the head framebuilder position at Masi of California. He held that position, building the nicest Masis ever to wear the label, for five years. When Masi closed, he picked up work from Dave Moulton and Bill Holland. Moulton got out of the frame business, Bill Holland drifted to titanium, and a tip from Richard Sachs sent us to Joe, who has built for us full-time since mid 1997. Joe and Curt share tips and ideas, and their combined efforts continue to make our frames better.

**Grant Petersen.** I'm 47, have ridden bikes a lot and been involved with bicycles since 1973. From 1986 through 1994, I designed bicycles for Bridgestone Cycle (U.S.A.), Inc. Then I started Rivendell, where I design our frames. I've had the good luck to have been influenced and taught by many smart bicycle people, and have furthered my bike education by experimenting, riding, and paying attention. Over the years I've come to know what I like aesthetically, practically, and structurally, and I have a good grip on what makes a bike fit and behave correctly. It is a thrill for me to see mere designs turned into real frames and bikes by such talented builders as Joe and Curt, and then painted by Joe Bell. I work with a talented crew of people, and we're all committed to lugged steel frames and forks. We've never made any other kind, and won't.

## Notes (inside rear cover)

We take extreme measures to ensure that your Rivendell frame is as safe, and strong, and straight, and long-lasting as a lightweight bicycle frame can be. Only the best materials and methods are used, and there are no compromises in either materials or process...One characteristic of all Rivendells is a low bottom bracket. We are convinced that a low bottom bracket feels better and offers more control over most terrain. The only places a low bottom bracket is not desirable is in off-road riding when there are boulders and logs to surmount. But on paved roads or fire trails, a low bottom bracket makes a better bike. However, it does not let you lean your bike hard while pedaling around corners. That's not something you should do in any case, but the fact is that some people have bad habits that go unpunished on bikes with high bottom brackets, but will not work on a Rivendell. In other words, when you buy a Rivendell, we expect you to ride the bike with a certain amount of skill and judgement. Practice slow-speed cornering to learn when your pedal hits, so you don't scrape it on a fast corner; or simply buy another bike...If your frame ever needs to be repainted, we will sell you a current set of decals at a reasonable charge (about \$10). If your frame gets a nick and needs touching up, we recommend Testors brand model paints or fingernail polish, whichever is the best match. Both of these paints are formulated to be brushed on (unlike the original paint), and usually a good-enough match can be had. Although we deliver the frame to you with what we consider to be the world's best paint job, it is healthy to keep in mind that your bike is a piece of outdoor equipment, and dings and scrapes are inevitable. The first one is hard, but get over it. If you fret about superficial chips, you'll not be able to enjoy the bike...Always make sure the wheel quick-releases are properly closed before your ride your bike. The dropouts do not have "lawyer tabs" on them, because such tabs are a nuisance and are inappropriate for a bike of this quality. If you do not know how to close the quick-release, learn from somebody who does. This can only be learned hands-on...We regret that the quality of this catalogue is not commensurate with the quality of the frames. If the frames cost more, we'd have more money to make a glossy, color catalogue! But the information here is correct, and we've tried to be thorough. The usual disclaimer: Not responsible for errors herein. For the latest frame information and prices, which of course are subject to change at any time, please check our website: [www.rivendellbicycles.com](http://www.rivendellbicycles.com). Or call us direct, at (925) 933-7304. *Thanks.*

Rivendell Bicycle Works  
Box 5289  
Walnut Creek, CA  
94596

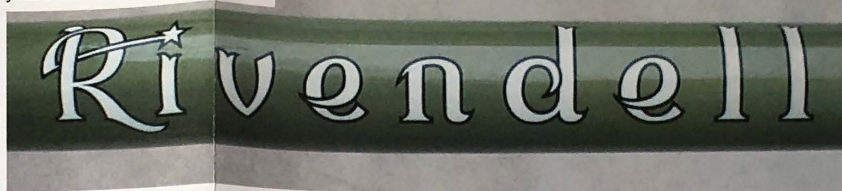
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PERMIT #816



LIGHT BLUE METALLIC. Head tube Plain Paint.



JOEL GREEN. Downtube & decal



HARVEST GOLD. Head tube. Standard Paint. (A Plain Paint head tube is like the one to the left. A Fancy Paint head tube doesn't exist—the "Fancy Paint" just adds cream to the bridges, dropouts, and fork crown)



ORANGE. Road frame, seat lug



COLEMAN GREEN. Bottom head lug detail, and road crown fancy-cut (see the 3 holes, and the curve), standard paint.(no cream wave on top).



YELLOW. BB shell, fancy paint (cream bridge)



CUSTOM BLUE. Custom-carved lower head lug. Cutting three lugs this way adds \$150 to the cost of your frame; but we can do it. Styles vary according to the builder and his mood (always good!)



LIGHT BLUE METALLIC. Road crown. Shown with Standard Paint (the wave on top is blue like the crown), and Unmodified (not "Fancy Cut", as below and over to the left and a bit below, the Green one)



SILVER. Fancy road crown with Fancy Paint. "Fancy crown" refers to the metal shaping on the sides (compare it to the one above), which costs an additional \$75 and varies stylistically according to the whim of the builder. "Fancy paint" refers to the creamed wing. A frame/fork/headset with Plain Paint costs \$2200. With Standard Paint, it's \$2250. With Fancy Paint, it's \$2300. Fancy crown adds \$75 to any frame. Ordinarily it stops right about there, we can carve up the lugs fancy, like those to the left. That costs another \$150 (or more), and styles may vary.



RED. Seat lug, road frame

We offer eight standard colors (harvest gold, coleman green, joel green, orange, red, silver, light blue metallic, and yellow), and three paint styles (plain, in which there's no cream panel on the head tube), standard (with cream panel), and fancy (cream panel, cream bridges, cream "points" on the dropouts). Other colors are possible upon approval and with an upcharge, and "Rivendell's choice" has been surprisingly popular, as well. The graphics are firm, though, so every Rivendell looks like a Rivendell!

YELLOW. Horizontal dropouts. Plain or Std Paint. With Fancy Paint, the inner surfaces of the triangle windows is cream, as it is here.



LIGHT BLUE METALLIC. This is our only sloping fork crown. It is a stock model, with drilling. Although it's not our own design, we like it a lot; and it's an option on road-style frames. Same price. Drilling free!



SILVER. Fancy-paint dropout (cream point)





**Color Notes:** The colors shown are close, but not perfect. You can see more "close but not perfect" colors at [www.rivendellbicycles.com](http://www.rivendellbicycles.com).

**Custom colors** run anywhere from \$50 to \$150, and we'll paint them so long as they go with our cream details (see the head tubes) and decals, and don't violate our sense of style! We're protective of the look, a point we'd like to emphasize without seeming insensitive to your desires. At any given time we may change the color selection. If you have a frame on order, we'll let you know of any new colors; and we'll update the information on the web.

#### Touch-Up Paint

The best touch-up paint you can get is Testors model paints. It's made for car and air-plane models, and sold at hobby shops and big drug stores. Although it's unlikely you'll be able to find a perfect color match, you're still better off than you'd be with a small vial of the original paint. The original paint is formulated to be sprayed on, and when you brush it on, it never looks seamless. Better to go with a close enough match (or something totally contrasting) and have it last - and Testors will. Can't find Testors? You aren't trying hard enough! It's been around for more than 50 years and is sold all over the place. But fingernail polish is a next-best choice, and if you go to a place that caters to 13-year old girls, you'll be amazed at the colors you can find. A small warning: Although we sympathize with you if your bike gets scratched, we honestly don't sympathize that much.

**Who buys a Rivendell? Normal people who want a bike they can ride and grow old with. We sell to craftsmen, teachers, professionals, bike messengers, wanderers who live on their bikes all year, teenagers who should be putting the money toward college, and retirees whose spouses have finally agreed to let them get one special thing now that the house is paid for and the kids are through school. Here are sample comments.**

First, I want to say thanks. Sunday I finally got a window and got to go for a nice long ride. A few miles out it started to rain and any other time I probably would have turned back, fair weather rider that I've become. But I didn't, was enjoying the ride too much. Maybe that's not saying a lot, but it probably says about all there is to say about why I wanted a new bike. Pure inspiration. On the road it is stable and forgiving but still lively. I found myself cornering more aggressively than I have in years. I love the bike. The workmanship is inspiring, the paint, beautiful, everything I expected. Most importantly, the ride is simply beautiful. Higher bar position means I have rediscovered the lower portions of my drops. —B. A., WI

I picked up my Riv on Friday. I was blown away when I saw the craftsmanship on the bike, and of course, by JB's stellar work. It is the absolutely most gorgeous frame I have ever seen. Now, the ride: I built the bike up Saturday, and took it out for its maiden voyage later in the day. Wow. This is the best riding and handling bike I have ever had, and I have owned a bunch since my racing days: Colnago, Merckx, Lemond, Vitus, Marinoni, you get the idea. I did the same hilly route (actually, it's all hilly where I live) that I do on my regular bike all the time, and it was neat to note how much better the Riv absorbed shock on the pock-marked roads, and how much better it climbed. Particularly the seated to standing hill climbing transitions. Descending was a blast too. It also has a light feel. Friday afternoon I had the frame in my office, and a couple of guys who ride Cannondales, Principias, Specialized, etc, came to see me, and I showed them the Riv. Most were speechless, and when they did comment, they thought it was a work of art. But they will not know how nice my bike rides unless they get one. —M.R., CA

Rode the Davis Double this weekend. At least two dozen people compliment the bike, I stopped counting after that. Thanks again... —A. R., CA

I haven't decided how it rides yet -- whether it anticipates my every move, rides on rails, or disappears underneath -- but I do know that it is beautiful and a lot of fun. I have noticed one characteristic of the bike on my in-bound commutes downhill, off-camber, 130 degree right turn. When I rode my other bike down this turn, I always had to concentrate to keep my line, and was still kinda wobbly -- despite the fact that I have over 25k miles of experience on this bike. But on my first descent with the Riv, with the same wheels, I negotiated the turn tighter than ever before, staying within the inner half of my lane. On the other bike, I would always drift out to the middle of the road, but on the Riv I felt much smoother and more secure. Not a double blind test, for sure, but I tried very hard many times to ride that corner on the other, and it never felt so good. I didn't expect there to be such an obvious difference between the two bikes, and couldn't be happier. —D. M., MA.

I went with a cycling tour group, and we did over 900 miles through the Alps, with almost 100,000 feet of climbing, including the climbs from the '97, '98, and '99 Tours. The Rivendell was the perfect bike. It is a great bike to descend on. I had not the smallest mechanical problem; and you would be surprised at how much dinking around people have to do with their bikes when they have skinny tires, tight clearances, and shifters that don't tolerate continued use without need for adjustment. I clearly had the prettiest and most reliable bike there. —E. B., Colorado

It is the most beautiful frame I have ever laid eyes on. The attention to detail in the lug work is better than any frame I have seen in the shop, in a magazine, or on the road whizzing by me. The bike shop I work at sees many fine, custom paint jobs, but yours are on another level. I hope you guys are selling Rivendell frames in 2040 but if you go down you could go into the business of professional packing. I unload bike boxes all the time and I have done various kinds of receiving for 10 years. The way that frame was packed was special. —S. M., Colorado

I got out for a 50 mile ride today through the Colorado National Monument... about 2500 feet of climbing, rollers and then 2500 feet of descent. The descent though was so nice; man that low BB really changes the stability. I loved it! I think the lower BB probably increased my cornering speed, as I just felt fine laying it way over. There are just no disadvantages to this new bike and position. I can get into a flat-back position and hammer, or sit up on the flats and relax and see the sights. Also the pea-sage green is very understated. It doesn't look so great in a garage, but up in the sage and pinon and juniper, it fits. Thanks again for above-and-beyond service. —J.R., OH

The frame is everything you said it would be. The detail and craftsmanship are truly special. The bike's striking appearance draws compliments from all knowledgeable riders who see it. I had read your comments about the ride characteristics and what to expect, and while it wasn't that I didn't believe you, I just wasn't sure I would be able to discern such subtle features. I was wrong! But best of all is the fit — no more stiff necks and shoulders after 3 hours on the bike. This is a bike that will encourage me to ride more. —A. M., Georgia

It rides unlike any other bicycle I've owned. It responds so quickly that sometimes I think it's doing the thinking, and I'm merely the rider. I like everything about it. My eleven year-old son enjoys looking at it almost as much as I do, but he did ask my wife who I thought I was spending so much on a bicycle. —K. K., Illinois

...a wondrous thing. It's hard to imagine any thing at any price that could be built and finished so well. —N. A., New Jersey

#### Last word on paints and touching up

A Rivendell's beauty goes down to the bare metal, and it wears its wounds well. Protect the underlying metal from rust, but don't be obsessive about keeping the frame blemish-free, because doing so will make you and everybody around you miserable. At some point you may want to get it repainted, but in the meantime, ride and enjoy it.

#### Painted Pump, Name-On-Frame

If you want a pump painted to match or your name on the frame, go to Joe Bell directly, at (619) 469-4312. He charges about \$30 for a painted pump if you supply the pump, and \$40-\$45 if he supplies it. We offer chrome-plated plastic Silca pumps, which work fine, weigh less than 6oz, look good with every color, and don't give your bike that "hey, I've got two top tubes!" look. Also, painted pumps tends to make you fret about pump scratches.

Names hand painted on the frame cost \$100, and again, you go to Joe Bell directly. We used to route it through here, but we've had a few costly mistakes with *steven* versus *stephen*, and so forth. So, we're trying to recover from them now. In general and historically, frames-with-names have been problematic, so they make us nervous, and if you go to JB for it, it won't cost you any more, and you can control the communication better if you go direct. JB charges about \$100.

Wonderful. Great balance, so smooth. It's just perfect; it glides along as though every road was freshly paved. —M. M., CA

Its beauty is exceeded only by its comfort and function. Perhaps it's inappropriate to compare its comfort to such a sedentary state of repose, but the bike is as comfortable as a barcalounger. There is no body tension in any handlebar position, as I've experienced in the past. I can easily be on the hoods or in the drops without restricting my breathing, tensing my trunk, or putting too much weight forward onto my hands. —J. H., CA

The bike is wonderful, comfortable, stable, a great ride. It handles the twisty descents of the Appalachians in fine style. I never feel out of control. It smoothed out bumps and doesn't exhaust me, even after riding many consecutive 100 mile days. —M.C., NY

*Awesome* is the word to describe the comfort and stability of the ride. I enjoyed it very much. I especially like the versatility of the extended head tube and the comfort it affords. In addition, the bike is beautiful, stunning. —A. L., CA

Thank you for the bike. The craftsmanship and ride are simply perfect. It blends comfort, performance and beauty in a way I have not experienced before. During Paris-Brest-Paris, I really appreciated a bike that runs straight unless I want it to turn. Then it turns with precision and ease. The bike was a joy, while people on other bikes had a hard time riding in a straight line. I have ridden numerous nice bikes in many long-distance events, but never has it felt so easy. I attribute a large part of this to the bike. Raising the bars almost to the level of the seat, a difficult step for a racer, has made a huge difference. I use a longer stem now, so my position is as aerodynamic as before. Yet my shoulders, hands and back hurt much less even after 23 hours in the saddle and 350 miles on the road. —J. H., WA

It is the most comfortable, stable, smooth-handling bike I've ever ridden. When people hear "stable," they often think "boring," which is not the case at all—this is an amazingly compliant, responsive bike. There's no twitchiness, no nervous-making flaky feeling no matter what the maneuver made. It requires less thought to control. Riding it puts me in a position to pay more attention to my surroundings, whether those surroundings are a bunch of excitable cyclists or the incredible lush greenery of Greenwood and Abbeville counties. Bumpy roads? Not a problem. Great bike. Not at all as I envisioned it - it works better. Good job. —R. F., SC