

Introducing Rivendell Bicycle Works

Our business is often labeled this or that by journalists or internet pundits who understand a limited number of business models & want us to fit into one of them. It's not a complicated business, but a label can't sum it up either, so I'll try to do that in the next 900-or-so words.

We're a small bike company, operating with a dozen or so employees since 1994, specializing in really good, but untrendy bicycles and gear. Ninety percent of everything we have is hard or impossible to find in a regular bike shop or mail order catalogue. Even rarer these days, not one frame, part, or accessory we sell is made in China.

A lot of what we offer *is* made in Japan, and that's unusual these days. With high labor costs and in a global economy, Japan has lost most of its export business in labor-intensive goods, because it can't compete on price, and the highest component of price is labor. But when it comes to bicycle-things made of smooth and glistening metal, no other country can compete with Japan. From brass bells to lugged steel frames to aluminum handlebars with beautiful curves, luscious finishes, and engraved crests, Japan is unequalled. That's the only way it can compete in a price-obsessed world.

We list the country of origin of everything we sell, and our menu includes clothing and

bicycle goods from Australia, New Zealand, Canada, Norway, Scotland, England, Ireland, Italy, Japan, Taiwan, Minnesota and Kentucky.

Our big ticket items are bicycle frames, and we make only lugged steel ones. The only saddles we sell are leather. We sell lots of wool clothing, and go to great lengths to get all wool, no blends. When a blend is inevitable, we make sure the wool content is as high as we can get it. We're puristic, but not purists, and certainly are not snobs.

Our typical customers are between 40 & 65, athletic, usually successful or good at something, and they're not searching for themselves or forge their personal identities on the bike. They're smart, love to ride bikes, usually own modern bikes & gear, and come to us when it's not working out and they think maybe another approach will work.

We like bike parts that make your bike more useful and comfortable and fun. We don't cater to racers, not even a little. We cater to *unracers*, *nonracers*, *recovering racers*...

Our selection is small, but everything is good. We try to buy from manufacturers whose approaches and abilities are a good match. Our prices are fine. A diligent recluse with a computer can knuckle down for a few hours on the internet and find a lower price on some of our more generic items, but our prices are fair and

on the low *side*, given the quality. Since we buy direct and sell direct, we're able to sell those expensive-to-make Japanese things at about the same price as carbon fiber equivalents that come from China and cost a small fraction as much to make.

That's a difference between tech & craft. Tech is buzzwords, hype, material, features, high profit margins and widespread appeal. Craft is less showy and suffers on the pop charts for it, but ultimately is more satisfying to own and use. We're all for high-tech computers, though. We run the business on Macs, have a fancy new website, and see no contradiction.

Our delivery is fantastic, with orders going out within 24 hours (and often within four) of being received. Our customer service is fantastic, not just because we're nice people beneath all the opinions, but also because we rely on repeat business. Eighty-five percent of our orders are from returning customers. We'd like more new customers, but it's hard to go after them, and we don't actually know how.

Visit our site if you get a moment, OK? It's rivbike.com. Thanks. —Grant



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RIVENDELL BICYCLE WORKS

Lugged Steel Bikes
Leather Saddles
Wool Cycling Clothes

www.rivbike.com



All of our bikes have real metal headbadges.

The Kinds of Things We Sell

Lugged steel frames, double-sided pedals that don't require special shoes or even toe clips. Saddlebags and assorted other bicycle bags—the best in the world, made just for us in American & England. Visibility stuff, like reflective triangles in two different sizes, and bulk reflective tape, ankle & spoke reflectors (not the clunky kind—our own). The best mirror ever.

MUSA brand (for Made in the USA) bike shorts, knickers, & pants that aren't tight & black & don't have sewn-in pads—so you can wear them anywhere. These will be your favorite bottoms, even off the bike. Seersucker shirts—also MUSA. Nothing beats them for hot weather riding. We have a reasonable assortment of Shimano parts, and lots

of Phil Wood. We have sidepulls that fit 40mm tires and fenders.

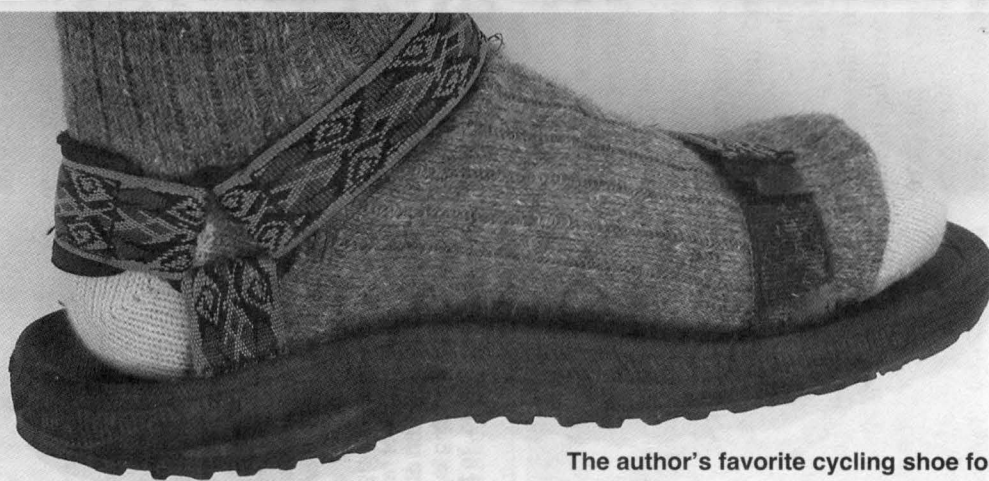
We are the country's biggest seller of pine tar soap. We have a few parenting books. Fenders. Great socks. Wool beanies, wool underwear and tops and pants. Leather saddles (Brooks, Selle An-Atomica, and soon others). We sell gorgeous, strong, elegant Nitto stems, handlebars, bottle cages, and racks. Many of the racks we have are our own design, and offer creative, truly useful solutions to gear-carrying challenges every non-racer faces. We sell one light, one lock, and zero helmets, because you can get them anywhere. We won't *not* stock something just because it's available here & there, but we emphasize special, unique, exceptionally good things that earn the space it takes to stock them &

make a visit to our shop or site worth your time.

We also publish *The Rivendell Reader*, a 48+ page magazine of sorts on all kinds of insider and esoteric bike topics, and 6000-word interviews with bicycle people who are worth listening to for that long and longer. You'll learn many things in every issue.

We don't sell racing gear, and in general steer clear of high tech. We also don't sell any bike, frame, part, accessory, or article of clothing made in China, which is even more odd these days. We *do* sell a \$3 measuring tape made in China, but we bought it from a maker with "USA Tapes" in the name and flags all over the website, so it's not our fault! But we won't re-order...

www.rivbike.com



The author's favorite cycling shoe for the past five years.

The Shoes Ruse

This is on our site, too. It always elicits angry letters!

The biggest myth in bicycle riding is the need for special cycling shoes and the benefits of stiff ones. The argument is: With a firm connection to the pedal, you will be able to apply power for the full 360-degrees of a pedal revolution. And stiffness helps efficiency.

Experts, riders, and the media repeat this over and over again, year after year. The assumption going into it is that we should all strive to be more like pro racers. But even so...

When elite pedalers have been hooked up to machines that measure muscle activity, the machines report that during normal pedaling at normal cadences, they don't pull up on the backstroke.

All they do is push down less on the upward moving pedal. And if the best you can do is minimize the downward force on the up-moving pedal, how does it help to be clicked or strapped in? It doesn't and can't.

There are *some* benefits to being firmly attached. In slippery conditions and vicious sprints, and when hopping the bike over a dead raccoon or up onto a curb, a connection to the pedal is a benefit. Slippery sprints? Dead animals? When it's that sloppy out, don't sprint. When you see a dead animal, ride around it.

And when you climb a super steep short hill, you can pull up on the upward-moving pedal for a few strokes, and doing so helps you turn over the other pedal (get it past 12:00 and into the power part of the stroke). Don't play to the exception.

There are real benefits to pedaling free. Benefits that rear their heads constantly:

1. You can wear any shoe, from boots to sandals. Shoes to suit the weather, not to fit the pedal.

2. More efficient muscle use, less chance of repetitive stress injury. Regular cycling shoes may give you some lateral float, but they lock your foot to the pedal (fore-and-aft wise) in one place, and that's not how we use our feet.

When you go up stairs or do leg presses at the gym (efforts not unlike pedaling up a hill), you push with the middle of your foot. Not with the ball of your foot, as you've been told is proper for cycling.

On long grinding hills, it is absolutely more comfortable to pedal close to your arch. You can't do that if you're clicked in. And on longer rides, it's good to vary your foot's position over the pedal, because doing this calls on certain muscles in your legs, and puts others to rest.

Shoes

You want only two things from a shoe: *protection from the pedal*--so it doesn't hurt to pedal--and *grip*..

You don't need speciality shoes to get either of them. Teva sandals, court shoes, Florscheims, Redwings and Keds. The Adidas Samba is a wildly popular shoe for riders who've escaped the click-in jail. It's an indoor soccer shoe. My own favorite is the Teva Hurricane. Tons of riders wear Keens and love 'em. These are all shoes you can wear off the bike, too. Shoes for the weather.

Pedals for normal shoes

When the pedal has a bigger platform, the pressure is distributed over a wider area, and the shoe sole can be much less rigid, thick, plasticky. There are pedals out there that let you wear the flimsiest sneak-

ers or even flip-flops, with no loss of efficiency and no pain.

The best pedals are double-sided pedals, the kind made for BMX riding. Some of those are heavy because they're made for riding off roofs and landing hard, but others are just normal, medium-to-lightish pedals that are perfect for the modern go-anywhere rider looking for a way out of the rigid-shoe jailhouse.

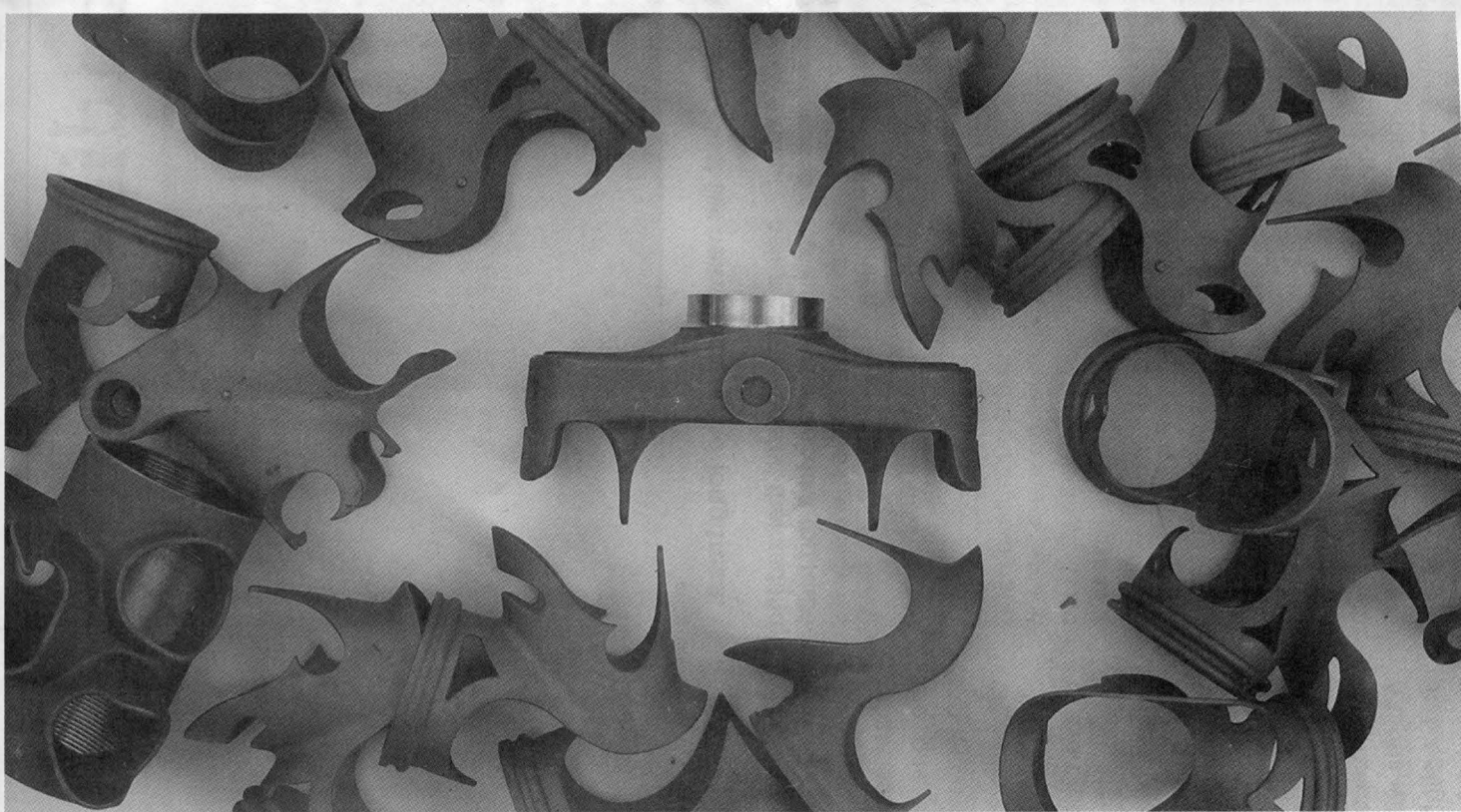
One More Irrefutable Benefit

Your feet learn to pedal in circles, *because they aren't forced to*. When you're locked into the pedals, your muscles don't have to learn, because they're going to move in circles no matter what. But when you aren't connected, your muscles truly learn to move efficiently in circles, and that seems like a good goal. If you want to train a dog to come, you don't keep him (or in my case her) on a leash. And if you want to train your feet to move efficiently in circles, you don't force them to comply by locking them to the pedal.

Summing up

It's not easy to give up old habits that you've practiced and espoused for 35 years (it wasn't easy for me). It's no easier when you're a new rider and just bought \$350 worth of pedals and shoes on your best friend's advice.

The most important and liberating thing I've learned in 40 years of riding nearly daily, is that normal shoes and pedaling unconnected is the way to go. It's the way most kids have always ridden. It's the way most of the world rides. It works great, and it is so liberating, you'll jump for joy.



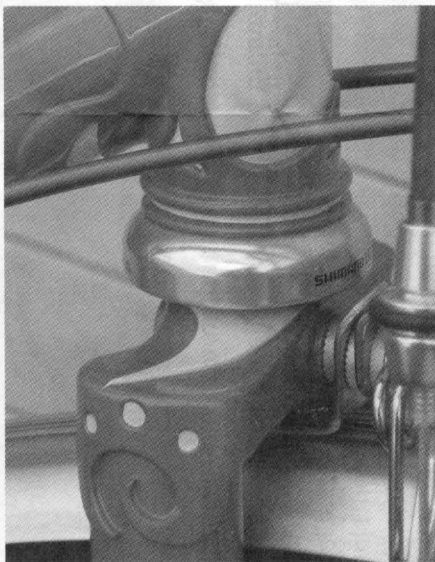
LUGS & FORK CROWNS & FORKS IN GENERAL

Lugs are the quaint steel sockets you see at the frame joints on today's "old fashioned" style steel frames, but thirty years ago and before that, most bike frames—good ones and bad ones—had lugs. Lugs began to lose favor in the early '80s, after mountain bikes started appearing without lugs. Lugs or not, they were good, fun bikes, and they got lots of non-cyclists onto bikes for the first time in years. Lugs came to be associate with road bikes, and the mountain bike group didn't care about them and didn't want them.

The acceptance of non-lugged frames was good news for bike makers. It cut labor costs by about 80 percent.

But the original purpose of lugs remains as valid today as ever: Frames are stressed most where the tubes come together, and lugs add extra material at this joint, making it stronger. A well-designed lug spreads the riding stress over a large area.

The extra strength should be enough, but a lug does more than that. It also allows brazing, a lower-temperature building process that, unlike welding, doesn't melt the frame tube. This was more of an advantage in the olden days when steels weren't as advanced and heat was quite damaging to their grain structure, but even today the lower-tempera-



ture brazing process makes for a stronger joint.

A practical advantage, but one not often talked about until it is the only topic worth talking about, is that a lugged frame is much more easily repaired than a welded one. That's because the tubes aren't compromised nearly as much in the original building process. A lugged frame can be crashed and repaired four, five, six times, without degradation.

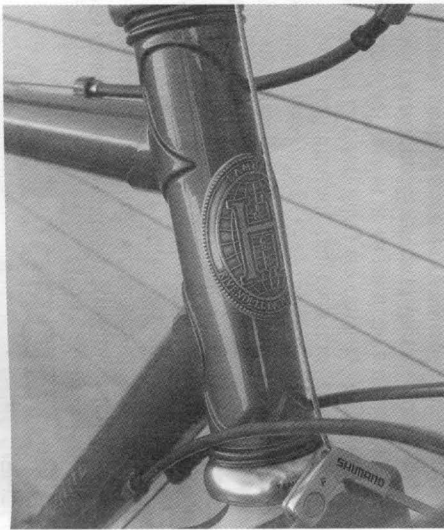
Do lugs look nice? Heck yes! And when you understand the function beneath the superficial beauty, they look even nicer.

A fork crown is also a lug, and contributes the same reinforcing/stress-distributing/repair-facilitating attributes of frame lugs. But it has an additional advantage that is particularly relevant in the year 2009, when nearly every road bike you see is crownless. And it is a boring thing called "fork blade separation." Bike riders don't talk about fork blade separation, but we want to mention it here, because it is a fundamental of what we think of as good design. If the fork blades are too close together, it limits your choice of tires unnecessarily. If the blades are too close together, you can't mount a fender. If the blades are too close, a broken spoke will make the wheel rub against the fork blades.

The normal ideal for many riders is a true wheel on a smooth dry road. But it's the responsibility of the designer and manufacturer to account for circumstances that are abnormal, but inevitable in the life of a rider. The maker is supposed to know more than the customer. You can tell a lot about a manufacturer by looking at its fork.

Does it have good clearance? Will it accept every tire you'd like to ride? If you ride in wet weather, will it accept fenders? Forks lead a hard life, and are the last part of your bike you want to fail. Is your fork strong now, and will it maintain its strength as it ages?

Sam Hillborne



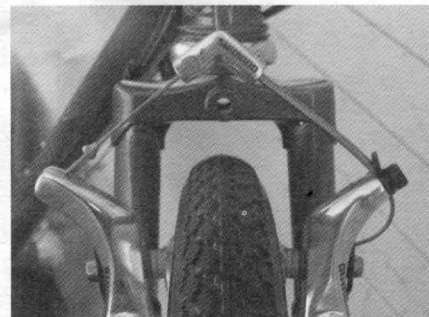
The bike you'll wish you'd bought after you buy your next bike and find out more about it later.

The Sam Hillborne is the “no brainer” of our line. It fits and rides as well as anything we make. It's superb for road riding, loaded touring, wet weather, commuting, and fire trails. Like all of our bikes, it is our own design and built by skilled craftsmen using our own investment-cast lugs, bottom bracket shell, and fork crown. And yet it costs just \$1,000 for the frame/fork/headset, or \$2,000 for a whole bike with the same parts we've used with unanimous success on bikes that cost twice as much.

It's not magic and there are no “insider secrets” we hope you don't ask about. It's good because it's well designed and supremely comfortable, and safe. It's good because it's hand-made by a guy in Taiwan who has built hundreds of other bikes for us, and whose

work we trust entirely. And it is cheap—in the monetary sense—because Taiwan labor is just a fraction the cost of U.S. or Japanese labor. We still have bikes made in the U.S. and in Japan. They don't ride any better than the Sam Hillborne. Some of the details are more delicate, but they are details you'd probably have to have pointed out to you, because they're small, and for the most part, superficial. They don't affect anything.

If you're at the point in your life where the Nth degree of uppityness in details matters to you, and you can afford to spend a little more for them—and you're looking for a super fine and versatile bike—get an A. Homer Hilsen, at \$2,000 for the frame and fork, it's a screaming deal, and it will be with you for 30 years.



But if right now you have a few bikes and none of them fits quite right, or they're all too specialized, and you just want a wonderful, comfortable, safe, and beautiful bike for less than the cost of yet another faux-racing bike with zip-pity-zip trendy parts and buzzword technology up the wazoo but no real substance to it...if you want something better than that, look at a Sam Hillborne.

A. Homer Hilsen



Unusual name, tremendous bike. For more about it, go to www.rivbike.com

The A. Homer Hilsen is a road bike you can tour with, a touring bike you can ride trails with, a trail bike fast enough for club rides on the road. It's a brevet bike, a commuter, a daily everything bike. It looks and rides like a classic road bike, but it's far more comfortable, and can take you places a road bike can't. On fire trails, for instance.

It's basically a fancier Sam Hillborne, and in fact came before the Sam. It's \$2,000 for the frameset, and lots of people can't afford that much, so we introduced the Taiwan-made Sam at half that price. But if this is the kind of bike you want—super comfortable, really smart, and beautiful and delicate in all its details, then spend the

extra thousand and get yourself an A. Homer Hilsen. You'll still be riding it in 30 years.

The A. Homer Hilsen's versatility isn't a result of design genius or high tech breakthroughs. It comes the way versatility *always* comes—by means of properly dimensioned tubes & properly located bridges, which lead to the clearances that allow fender and chubby tires. You can ride 38mm tires with fenders on it.

It feels odd to boast about clearance, because making forks the right length and putting the seat stay- and chain stay-bridges in the right spot for good clearance should be a given. And yet good clearance is almost unheard of these days. Bike makers are agog

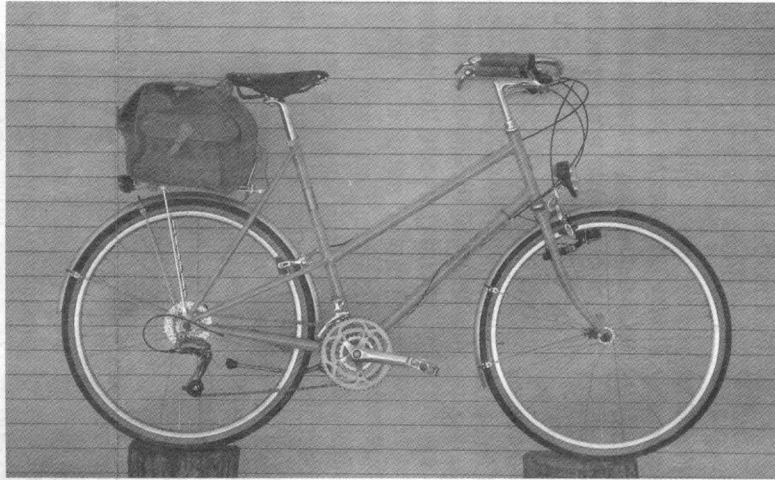
over materials, weight, ten-speed cassettes, and have leapfrogged good design in their quest for lower weights and more sales.

The A. Homer Hilsen frame is stuffed with good design, and builds up into a bike that fits phenomenally, offers couch-like comfort, and will take you swiftly and efficiently, unloaded or with overnight loads, anywhere you can pedal it. It is what a bicycle was meant to be.

The A.H. H. takes either sidepull or centerpulls brakes. Frames cost \$2000 (made in the USA and Japan). We can assemble for you a complete bike for about \$3,400.

It is a stunning bicycle—beautiful, tough, strong, safe, comfortable, and ready for a lifetime of riding.

Betty Foy



A fully festooned Foy, with kickstand, fenders, generator light, & a Nigel Smythe & Sons saddlebag.

The Betty Foy is designed for women, with a low diagonal tube that's easier to step over. That is the only significant functional difference between the Betty Foy and the Sam Hillborne & the A. Homer Hilsen. Anything those bikes are good for—so is the Betty.

- road rides--solo, club rides, fitness rides, whatever
- weekend touring
- fully loaded touring
- commuting
- fire trails
- bike camping.

Just as with our other bikes, clearance for tires and fenders is key to the Betty Foy's versatility. It has enough to fit tires up to 40mm

wide, so it's good on rough roads. It has clearance to take fenders easily, even with 40mm tires, so it's the ideal foul weather commuter. What you can do on a bike, you can do on your Betty Foy.

This style--mixte, lady's bike, step-thru, whatever you like to call it--came about originally to allow a woman's dress to drape gently down so it wouldn't get blown up by the wind. Most women don't wear dresses anymore, and if they do they don't ride bikes in them; but the main benefit to this style frame is the low step-over.

You don't have to swing a leg high over it to get on, which is helpful if you have a child or big load of groceries on the back. Same if you have a bad hip.

Traditionally, most bikes designed for women have been cheap or substandard in some way; and have cost less.

The Betty is a women's bike, but we sell them to men, too. The only things girly about it are the name (from a William Wordsworth poem, *The Idiot Boy*, 1797) and the heart cut-outs in the lugs. If you're a guy and want a Betty, & can handle the name and the hearts, more power to you.

The Betty and Sam are our only two frames made in Taiwan. (Nothing we sell is made in China.) They cost less for it—\$1,000 for the frame/fork/headset and \$2,000 or so for a whole bike—and are wonderful bicycles.

Atlantis



A loaded Atlantis, ready for an overnight bike-camping trip.

The Atlantis is our touring bike, and our most versatile bike, period. It is the bike that, probably, is most associated with us, and it's the one we've had in our line the longest.

The latecomers now encroaching on its turf are the Bombadil (which is even more heavy-duty and not much heavier); the A. Homer Hilsen (which is lighter duty and has a more sporty-roadish look about it, but still has 80 percent of the clearance and tire capacity of the Atlantis); and now—like one more crow to the scarecrow—the Sam Hillborne, which attacks the Atlantis with a half-as-much price and a slightly heavier duty frame than the A. Homer.

But the Atlantis continues on, as good, as comfortable, as rugged and great riding and versatile as it ever was and has been since it debuted in 1998. Many have traveled the world, many more will.

It is designed for loaded touring, and accepts any tire up to about 2.3-inches wide—which also makes it a fine off-road bike. All the braze-ons are there for racks, fenders, extra bottles or generator lights, and a small front Nitto mini-rack.

Sizes 56cm and smaller take 26-inch wheels; 58cm thru 64 take 700c wheels. The proportions work out better that way; it's a better way to design a wide range of sizes, and we mix wheel sizes by

size in all of our wide-ranging bike models.

The Atlantis has been built up with more variety of parts combinations than has any other of our models—drop bars, swept-back (“Albatross”) bars, and Moustache Handlebars are all common, and nearly equally so. V-brakes or cantilevers.

When you get an Atlantis or any other of our bikes, we usher you through the parts-picking process with infinite patience and experience, and make sure the parts you (or we) put on your bike will get you the result you want. Bar style, crank length, gearing, shifter type, wheels, and virtually ever part on it—will be correct, just perfect for you. And we have a foolproof, simple, proven-on-thousands/no fail sizing method.

Materials & Weight & Other Considerations

The weight of our typical, average CrMo steel frame and CrMo steel fork is about 6.2lbs. Not just the frame—that 6.2lbs includes the fork, too. It's *twice* as heavy as one of today's superlight carbon fiber frame/fork combos.

But a frame without parts isn't rideable without parts. Parts can weigh 13 to 19lbs. The 13lb package limits you to smooth roads, good weather, and ideally, a body weight of less than 150lbs. It is designed for racing, not for real-world riding, and especially not for long-term safety.

With 19lbs of parts you can have a bike that will take you onto any road, many trails, in any weather. You get stronger wheels, bigger tires, longer-wearing cogs, lower gears, & an approach to purchasing bike widgets that considers value, longevity, safety, and practicality, not just weight.

But 19lbs of parts sacrifice some zip for robustness, and let's say you want some of each and are willing to compromise. A well-selected 16.5lb parts package will do well. We'll use that as the parts poundage here.

When you add 16.5lbs of parts to a 6.2lb frameset, you've got a 22.7lb bicycle. The same 16.5lbs of parts on a 3.1lb featherlight carbon frameset, and it's 19.6lbs—13 percent lighter.

But what does carbon offer other than light weight? Carbon is labo-

ratory-tough, real-world wimpy. Carbon has a history of catastrophic failures. *It's strong in the lab, not tough in the world.* A surface nick makes it unsafe to ride.

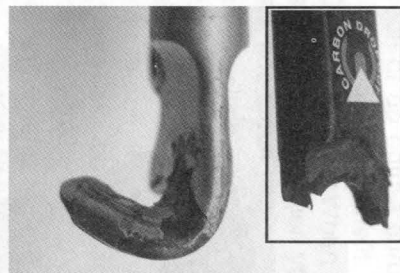
Exposure to sunlight degrades the resin that protects the carbon. Carbon frames have a practical life of less than a decade, and those that get ridden hard are probably best retired within 5 years. Many carbon riders like to upgrade every few years anyway, so it's not a problem.

On the other hand, steel ages well, and well-designed 30-year old bikes retain most of their as-new strength. But back to weight:

A bike needs a rider like a car or rocket needs an engine, and if the rider weighs 175lbs with clothing, and carries a reasonable 2lbs in water bottles, water, pump, cell phone, and repair kit, a more clear picture emerges.

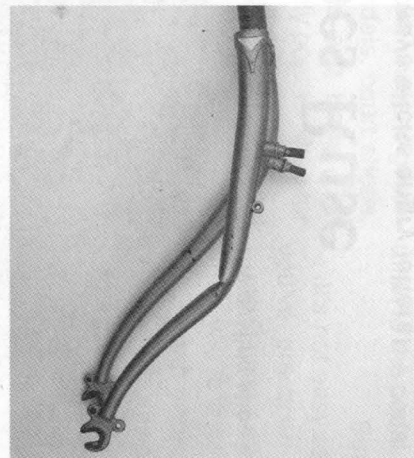
Now the "light" package weights 196.6 pounds and the normal package—the only difference being the CrMo frame and fork weighs 199.7lbs—a difference of about 1.6 percent. And the frame and fork in the "heavy" package provides a wonderful, safe, comfortable ride for decades. For just a 1.6 percent weight difference.

If you want a strong, safe, bike for 10-20-30 years, ride steel. Whether it's one of ours or somebody else's. Steel doesn't rule the peloton, just the real world.



Huh? Well, the steel dropout on the left was clamped in a bench vise and intentionally bent this way—to demonstrate that steel bends, doesn't snap. This could never happen in real life, but it makes the point, and this dropout could be straightened and ridden safely for 10,000 miles.

The carbon one on the right was clamped tight to a roof rack. The wind blew from the side and did this. Carbon doesn't bend. Bending is good! The fork isn't even recyclable. To the landfill!



Here's an old chestnut from the archives. This steel fork was commandeered by a 200+lb rider carrying 30+lbs of gear 20+mph into a 300+ lb boulder. The fork bent, it didn't snap. This is how steel responds to trauma. It could have been bent back and ridden a few miles back home. But he walked. That's OK!

Bombadil



This is pretty much what a mountain bike ought to be. Ideal for heavy riders and long treks.

“Mountain bike” used to mean a stout, simple bike with big tires, low gears, and a riding position good for everything from comfy cruising to bumpy descents you wouldn’t dream of riding on a road bike. Then racers got ahold of them, made them as much like motorcross motorcycles as the law allowed—under the banner of progress—and today’s mountain bikes are the complicated result.

The Bombadil is our response to the silliness. It is not for racers. You cannot go as fast down hills on it as you can on a complicated bike. But it is superb for all kinds of rough-stuff riding, and when safety and durability are considered, it is the superior bike. Like all of our bikes, it is all steel, because steel is the toughest, safest, and best frame material; and every joint is lugged, because lugs are the best way to join steel

tubes. There’s a heck of a lot of American labor in each frame, and a Bombadil should last you thirty-fourty-fifty years.

Its most glaring feature is the second top tube (on all but the smallest frame). It’s there for a good reason: It adds strength by maintaining the triangulation of the main triangle as the frame size gets bigger and the head tube grows. The same “triangulation technology” can be found in the Third World on cheap bikes that haul heavy livestock and firewood over rough roads, and last decades. The Bombadil was inspired by these cheap bikes, but is made with the best modern steels and the best craftsmanship. It will continue being a functional and safe bike long after today’s heavily-linkaged carbon and aluminum bikes have given it up. You might think it would be heavy, for

being steel and for the second top tube. The second top tube adds about 7 ounces; we say it’s worth it.

The Bombadil, then, is an anachronism, and it’s a better bike for it. Four sizes—48, 52, 56, and 60cm. All but the 60cm take 650B wheels (halfway between 26-inch and 700C). This wheel size is no longer the freak it was just four years ago, and tire availability is good. More importantly, being bigger than 26-inch wheels, they roll over bumps better; and being smaller than 700C, they allow the smaller frames to be designed better than is possible with big 700C (29er) wheels on small to mid frames. When you’re looking for a super mountain bike that doubles as an unbeatable expedition touring bike, get a Bombadil.