

THE RIVENDELL READER • ISSUE 19 • 2000 / SPRING

WHEN “ORANGE ROUGHY” MIGHT HAVE MEANT ANY OF A NUMBER OF THINGS

We are often asked how we're doing, thank you. We're doing fine. We lost money yet again last year, but not as much, and mostly on paper. Cash flow is neutral, and we have no buffer. We're doing better than many bigger companies. We don't have as much competition as most other bike dealers and manufacturers (we are both a dealer and a manufacturer, you know), because we aren't in the commodities business, and aren't trying to predict the next trend. There are problems which seem to be able to be solved by a \$5,000 band-aid (some computer stuff and a new phone system), or a \$4,000 band-aid (new tire mold), or a \$15,000 band-aid (more catalogues, and in color), or a \$10,000 band-aid (we found a pile of _____ and would love to buy them all before they're sold to someone in South America); or just getting the right extra person here. I think this must be a familiar scenario for most small businesses.

One of our T-shirt slogans says, --Resisting Industry Trends" but a more accurate description would be, "Joyfully ignoring all the wacky stuff that's wrecking bikes," although that sounds too harsh for a T-shirt. It's in the running, but people have been known to take tongue-in-cheek humor the wrong way. We are joyfully ignoring it, though, and there's a lot of it out there to ignore.

About 10 years ago, when salmon and tuna started getting scarce, the fishing boats fished ever deeper, and eventually scooped up some orange roughies. I read in a book about fish and fishing, that orange roughies don't have baby roughies until they're 30 years old; and market-sized orange roughies, the ones you see in the frozen food section, are close to 100 years old. Do you want to eat a 100-year-old fish, or not? Save the Orange Roughies! Maybe that should be our next T-shirt slogan. It would upset all those people who have stock in frozenroughy.com. Still, save them orange roughies.

There's no interview in this issue. An telephone interview was conducted, all the way to England, but we screwed up and it didn't come out on the tape. So, next issue. If there's someone you'd like to see interviewed, [send me his or her](#)

[name on a postcard](#), and include a telephone number. We're after people of general cycling interest, not necessarily the local hero or heroine. Harold Wooster is a fellow I'd like to interview. Sumner White, too. Peter Enright of Phil Wood, somebody from T.A., and maybe Keith Bontrager. Ed Begley Jr. would be good. One of you knows him, I'm sure of that. Graeme O'Bree is my dream interview, and there's actually a remote possibility there. Anybody who can manufacture his own bike parts (or her own) out of washing machine parts, and break the existing World Hour Record on a bike so equipped...should be a hero in anybody's book. You'd think.

Skip this paragraph if you don't like gloomy stuff. ~~Oh—you like it?~~ Fine. I'm sorry there's not much substance to this editorial (apologies to orange roughies and other aforementioned dignitaries). It's been a rough week. Today is April 3, and the orders have tailed off, we need to get this Reader out, and sometimes I want to just hang it up, but it's not that easy, and it's not as though alternatives await me. Besides, I love Rivendell. We have good people here, our customers (you guys) are terrific, and I believe our mission is worth fighting for. It's just hard sleeping on ledges all the time (see "no buffer" earlier). Money comes and goes. We grow and our expenses keep step. I've been wary from the start about building a house of cards, but it seems so easy to let that happen, if you just don't consciously, relentlessly squash projects and squelch growth opportunities. Our list of projects is exciting, I think we could do Good Things, but it all costs money we don't have, and that's frustrating. A new tire, Atlantises, a frame after Atlantises. New computers, a better phone system. Our printer craps out a lot these days (I think that's an o-kay use of the word). The web page needs updating more often than I can manage to do it. We're trying to move. We're trying to hire. We're trying to promote, and it's all expensive. I see big glossy expensive ads that say nothing or just shock and strut, or make pathetic humor, and they cost \$6,000 to create and \$6,000 to \$20,000 to run just once, and you see them about 10 times. Maybe they just have a bigger house of cards.

On a brighter note, thank goodness, I was in Tucson a while ago to give a cou-

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A LOOK AT LUGS, ROUND THREE: SAN RENSHO NSL

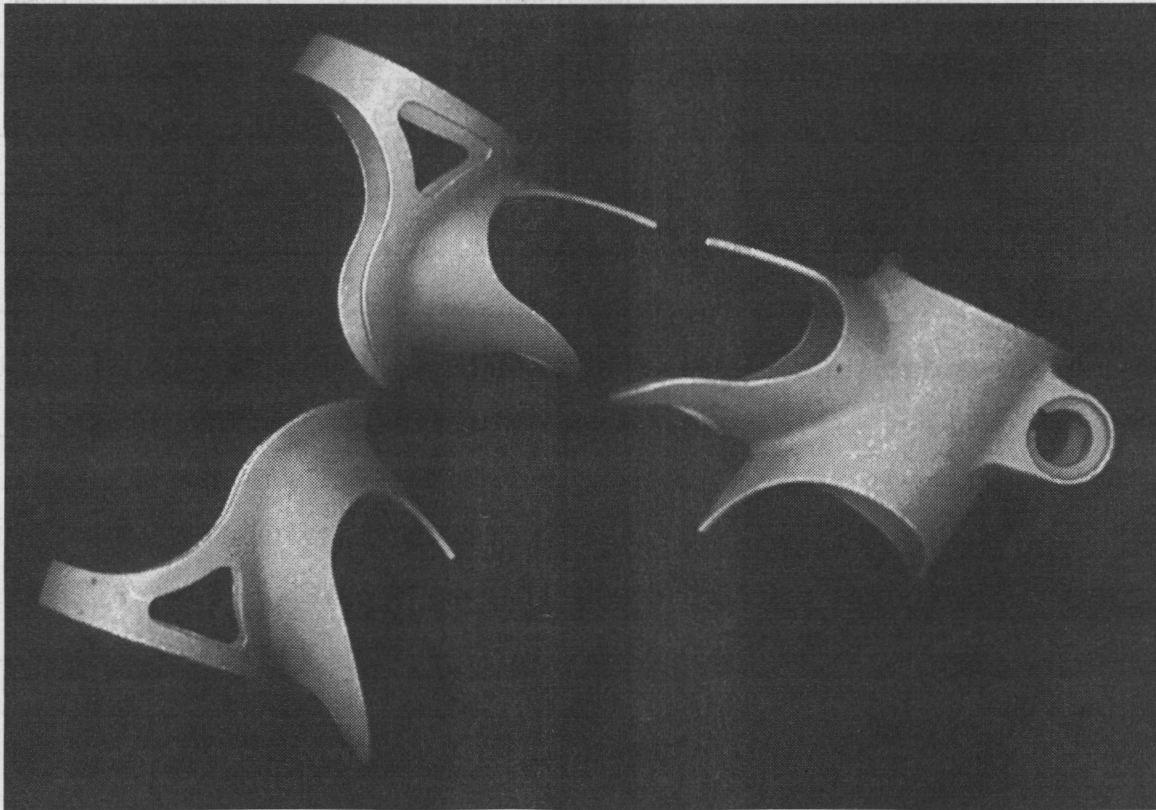
These are the lugs shown in June 2001 of our lug calendar, and if you read the accompanying fine print text on the bottom of that page, you'll know I'm jealous of the design. I like the unexpected curve-changes and the imbalance of material that works so well even though it seems as though it shouldn't. What I mean to say is, I wouldn't have predicted the bottom portion of the curve by looking at the upper portion, and I wish it was my idea.

First, some history. These were designed by Yoshi Konno, a former racer who retired and started his own company, 3Rensho, which is pronounced "san-rensho," since in Japanese, 3 = san. The name translates as "3 consecutive victories," a reference to winning three Keirin races in a row. Keirin is a specific kind of Japanese track racing, and I guess if you win 3 in a row, that's good. As for the NSL name, I'm not sure. Recollecting earlier brochures and trade shows, these were marketed as a superlight lug set, and during their introduction, they were indeed new, so I've put those two facts together and deduced that NSL stands for "new super light." However wrong I might be, the guess isn't as anglo-centric as it sounds, since

Japanese companies have a history of naming products with English-sounding names. They don't do it all the time, though.

3Rensho frames are or were high-end, pro-quality frames whose U.S. heyday lasted from about the late '70s to the early '80s. For the most part, they were neater frames than many of the Italian frames of that time, but if you want an Italian frame, you wouldn't be talked into a 3Rensho. 3Rensho frames came with a variety of lugs on them, but I don't remember any of them having these NSL lugs, so I think these were designed in the "post-U.S. heyday" period. A 3Rensho builder named Makimo now makes frames under his own name, and when we visited the painter who'll paint Atlantis frames, we saw a Makimo frame there, and it had these lugs.

The first versions of these were bulge-formed in Japan, by a company called Nikko. Bulge-forming is like blowing a balloon up into a pre-shaped mold, but in this case, you blow up metal tubes (with closed ends), and they used oil and pressure, not air. Those blown-up forms were then laser-cut to shape, and things like the seat binder ears would be brazed on by the frame



1. Here's a profile of the set. Look at the way the lower curve changes direction slightly. isn't that neat?

builder. That doesn't add value or anything else. It just takes time.

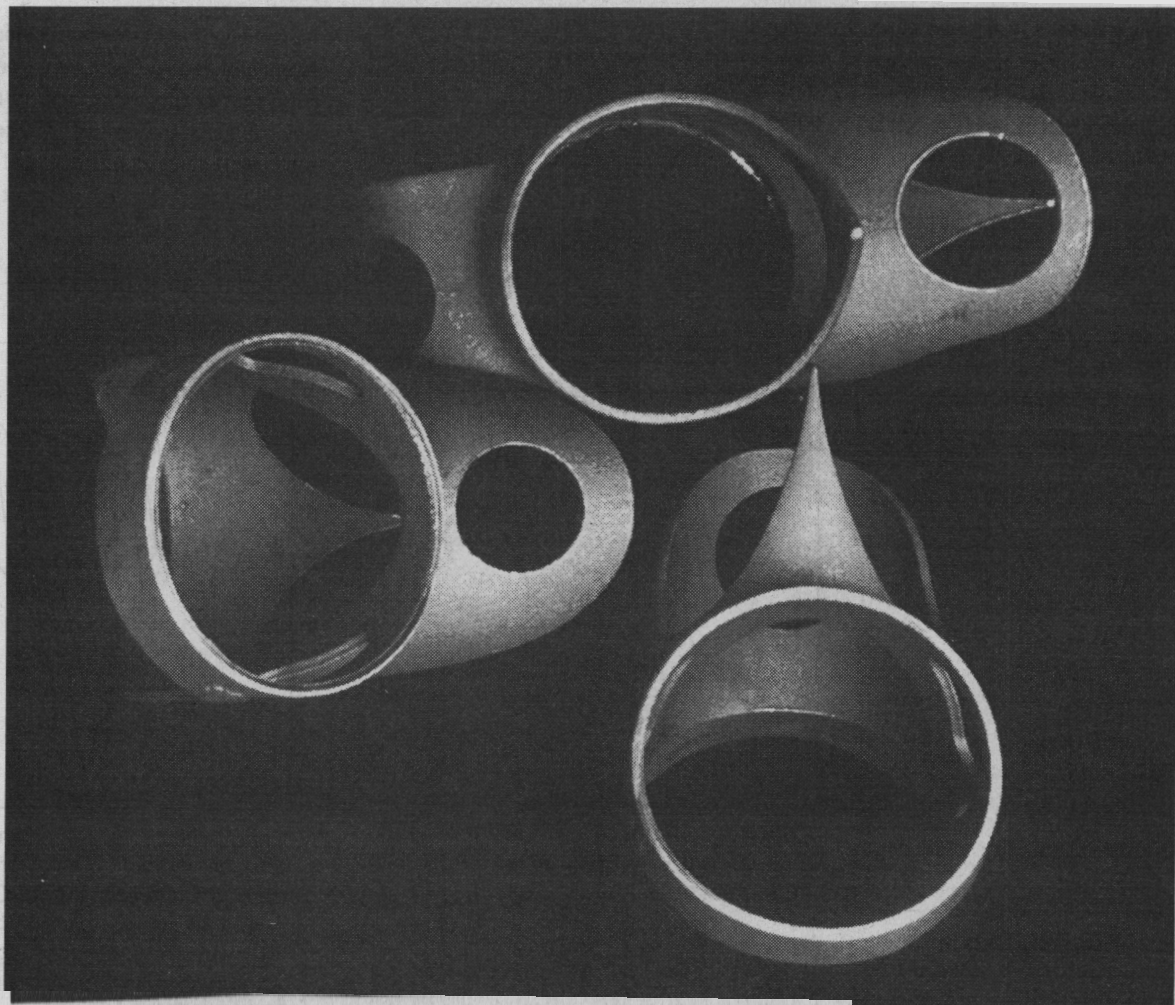
This version, which is cosmetically identical, if a bit thicker, is investment cast in Taiwan by Long Shen, who is as good as anybody in the world when it comes to making lugs. Their entire business is bicycle frame parts, so they know how. Note the integral (cast-on) seat binder ears.

This NSL model seems influenced by certain styles of Prugnat (French) lugs. The large windows are an old, familiar detail seen on some Prugnats, and here it is again. The spoon-shaped lower spigots again are French style, and have been used on Nervex Pros, Dubois, and many other lugs. The round holes are like those in Cinelli lugs (RR16 or Oct 2000 on the calendar). The overall proportions, which include a medium-short point on the upper spigot with a large, rounded spoon, is also influenced by French styles, or so it seems.

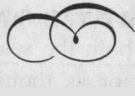
It's hard to design anything in a complete vacuum, and the combination of details in this NSL lug set makes it a unique. The

thing I like most about it is the really subtle change in the radius of the curve in the lower spigot on both the seat lug and the upper head lug. It looks imperfect, or as though somebody changed notions halfway through it. I like how it looks.

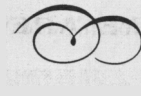
This lug set is made only in traditional dimensions, which means a 1-inch top tube, and 1 1/8th inch seat and down tubes. The downtube and seat tube dimensions are still common, but few makers use 1-inch top tubes anymore. Although Eddy Merckx won 445 pro races riding frames with one-inch top tubes, and Lon Haldeman has well over 250,000 miles on his 20-year old, second-hand Astro-Daimler frame with a 1-inch top tube frame, modern cyclists see them as too skinny and flexy, and are afraid they'll be slowed down by them. Consequently, when you combine the dearth of lugged frames with the unpopularity of 1-inch top tubes, and the fact that these lugs aren't even distributed in the United States, it is easy to see why we'll probably all go our entire lives never having seen these on a bike. As they say in Mexico, *¡Que lastima!*



2. The spoons and one opposing point. The spoons go on the underside of the tubes, where their stress-distributing qualities will do the most good. The holes have to be modeled after the holes in Cinelli lugs. The points are sharp and skinny.



FORGING 101



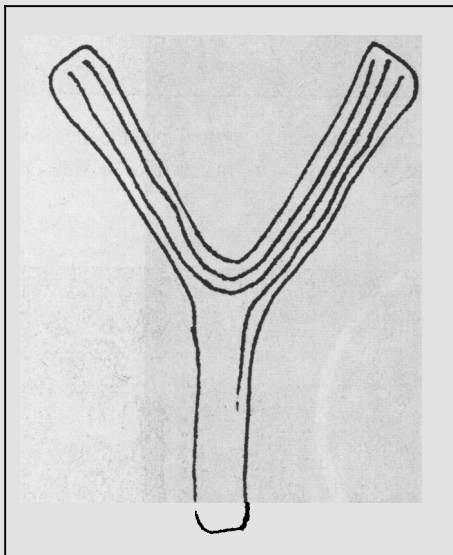
FORGING

Forging is when you take a nearly shapeless form and smash it into shape in a mold called a die (or “forging die” in this case). Forging is used when:

- the part to be made will be under lots of stress.
- the shape of the part is relatively simple, and you don’t plan to change it.
- you have \$10,000 to \$100,000 to spend on a forging die, and some way to operate it.

Some bicycle parts that are suitable for forging, and have in the past been forged, and often still are forged, include stems, pedal axles, bottom bracket spindles, fork crowns, brake arms, hubs, cranks, and dropouts.

Forging takes a strong metal and makes it much stronger. It does this by imparting a grain (not unlike the grain in a piece of wood) to the forged piece, and like the grain in a tree branch, the grain in a forged part follows the contours of the part. This gives it multidirectional strength, which is always beneficial when the stresses on the part are coming from many directions.



Cross section of a forged slingshot. The grain follows the contours. It’s like a tree branch. Finish the drawing by drawing in the grain in the handle.

CASTING

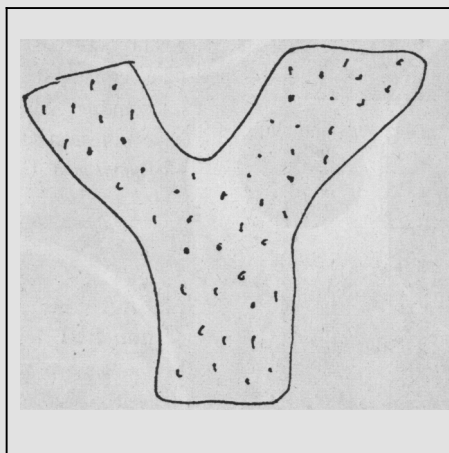
Casting is pouring molten metal into a mold and letting it harden. Casting is used when:

- the part to be made is under relatively little stress.
- the shape of the part is thin or complex., and you’re pretty sure it won’t change.
- you have \$2 thousand to \$10 thousand to spend on a mold.

Some bicycle parts that are commonly cast include less expensive stems.... brake arms... crummy cranks... dropouts... derailleur bodies... shifters... lugs and fork crowns... brake lever bodies

Casting isn’t a bad way to make something, it’s just not as strong as forging. Cast dropouts are common, but they have to be thicker than forged ones, and even so, cannot be stressed as much without failing.

There are different types of casting, each with its structural and economic points. Die-casting and investment casting are two that are commonly used in bike parts.



Cross section of a cast slingshot. no grain. Gets strength by bulk., like a Presto-Log. Add a few dots!

MACHINING

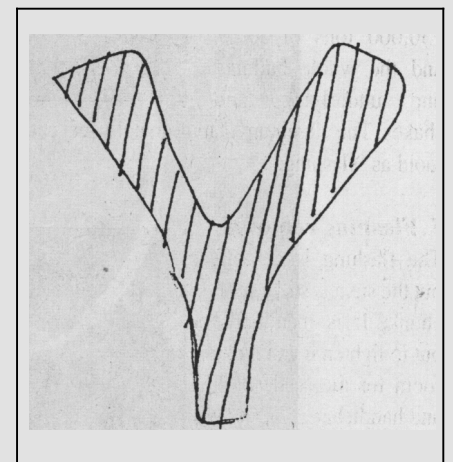
Machining is cutting the shape into a piece of metal by removing what you don’t want.

Machining is used:

- for prototyping, before investing in a costly mold or die.
- when you need production fast, but want the flexibility to change shapes at a moment’s notice.
- when you have \$10,000 to \$150,000 to invest in machinery that must be used for many parts.

Some bicycle parts that are commonly machined include stems, pedal axles, bottom bracket spindles, brake arms, hubs, cranks, and dropouts.

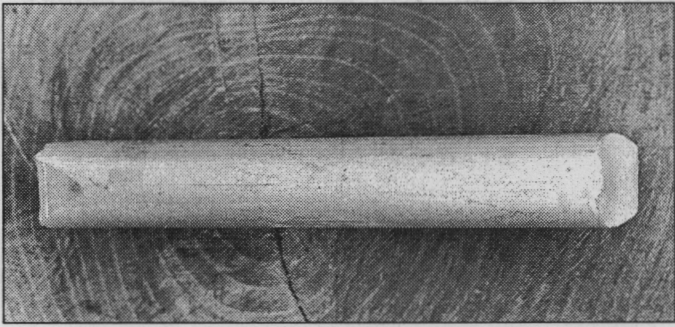
Machining is used by big companies to make prototypes (unless they have good 3-D design software), and by small makers to make small runs of parts. In general, machined parts fall somewhere between cast parts and forged parts in strength. Sometimes it is the most practical way, too.



Cross section of a machined slingshot. One-directional grain, one-directional strength... it’s like a Wham-O slingshot, or two-by-four. You wouldn’t buy a two-by-four with the grain running perpendicular, would you? (Those are just for karate demonstrations.)

SIX STEPS IN A NITTO FORGED STEM

(THERE ARE ACTUALLY NINE STEPS, BUT THESE ARE THE MAIN ONES)



1. Raw extrusion.

A mass of aluminum (alloy 2014) is warmed and forced through a die, resulting in this shape. We are all extruders, in a manner of speaking. This piece is 9.5 inches long x 1.375 inches thick. It weighs 1.4 pounds.

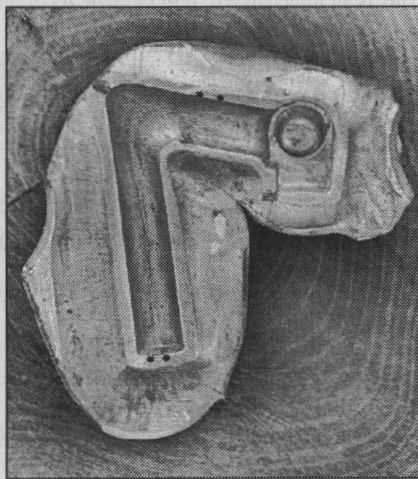


2. Bent extrusion.

This prepares the extrusion for the forging die, since you wouldn't want to forge it into the wrong shape. I don't know how much force is required, but no doubt the machine that did it costs more than a do-it-yourselfer can afford.

3. First forging.

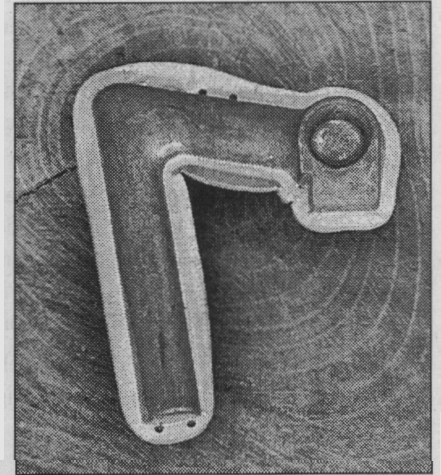
The bent extrusion heated slightly (even in cold-forging, which this is), and smashed into shape in a forging die, a two-piece mold. The lower half of the die (mold) is stationary and mounted on a huge block. The upper half is its complement, and "falls" onto the bent extrusion with up to 150,000 tons of force, and the whole building and underlying land shakes. The aluminum that ultimately gets cut off seeps out the sides of the mold as "flashing."



4. Second forging.

The first forging is then forged a second time, to further compress the metal, orient the grain, and refine the shape. It often requires yet another forging die, putting the cost of forging even further out of the reach of regular people and most small companies.

The stresses of forgings wears out the dies, in time, and it is common for some forged parts to have a lifespan (in the market) for ten years or so, and then the dies wear out, and it costs too much to make others, so the maker stops making.

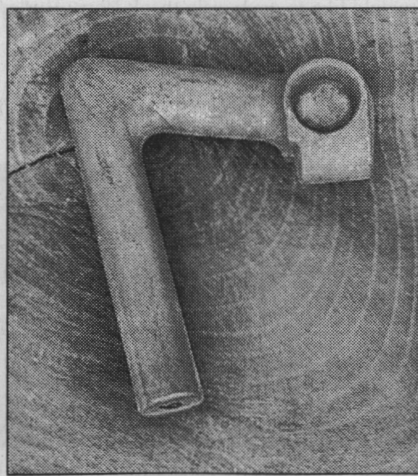


5. Flashing removed.

The flashing is cut off, but the stem is still a solid chunk. It is then bored out to lighten it and make room for the binder bolt and handlebars.

Since the forging can be only so detailed, the final dimensions of the stem are achieved by machining and polishing.

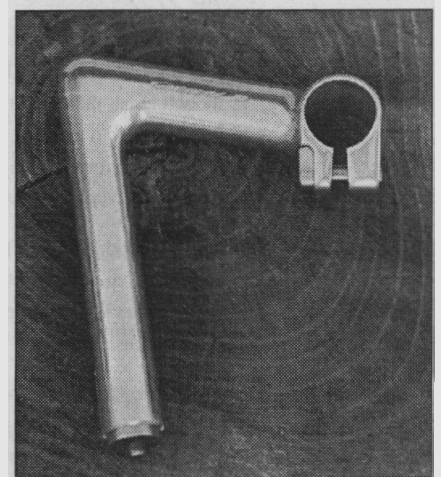
I believe, but am not certain, that this is the stage during which the stem is heat-treated, in the cases when the stem is heat-treated.



6. Engraved and polished.

In the case of a Pearl stem, it is then engraved and polished.

A Pearl stem is remarkably strong. It weighs more than a typical welded stem (of aluminum or steel), but has that forged-in grain that gives it magnificent integrity.



SADDLE SORES

BY BERNIE BURTON, M.D.

A WARM, HUMID CROTCH AND LOTS OF PEDALING CAN LEAD TO SKIN PROBLEMS, INCLUDING THE CLASSIC SADDLE SORE, IN ALL ITS THROBBING, RAGING GLORY. CYCLING DERMATOLOGIST AND RIVENDELL MEMBER BERNIE BURTON TELLS US WHY THEY HAPPEN, HOW TO AVOID THEM, AND IF YOU DON'T PAY ATTENTION, HOW TO GET RID OF THEM.

THE SADDLE SORE DEVELOPS IN THREE STAGES.

STAGE 1: HOT SPOT OR ABRASION

This is caused by rubbing your thighs and skin under the ischial tuberosities (*ishih al toober aw cities*, but from now on, just “sit bones”) against the saddle. Pedaling or just riding over bumps can cause this.

Since abrasion is the cause, decrease or eliminate it. Here's how:

1. Set your saddle to the proper height. If your saddle is too high, your sit bones will rock over the saddle as you pedal, causing friction
2. Get a good saddle. It should be wide enough to support the sit bones; smooth, so it doesn't cause friction; and it shouldn't be filled with shiftable mushy gel, which can move around, increasing friction. Leather is a good start. It's smooth, doesn't shift, and depending on the model, supports the sit bones properly. I personally ride a Brooks B. 17, but I've been a leather saddle fan longer than Rivendell has existed. Any sort of suspension—ranging from higher volume tires run at lower pressure, to Allsop Beams, may reduce friction, too.
3. Wear seamless-chamois cycling shorts (if you're getting sores in the areas of seam-to-skin contact). Some chamois have a baseball-style seam; some have a single seam up the middle; and some have none at all. Figure out what works for you. Seams in cycling short chamois tend to be flat, and most cause no problem, but if you find yourself irritated by them, get shorts with a seamless chamois.
4. Coat your skin and/or chamois with Vaseline Petroleum Jelly. Cover under your sit bones, and any place that might rub, or has been a problem in the past.

One concern some riders have with Vaseline is that it might plug their sweat ducts. This is more likely to be a problem on faces, where the ducts are smaller. I've never seen clogged crotch ducts. Vaseline is pure, and nobody is allergic to it. If you ride a lot, by all means, get some.

What If I Still Get a Saddle Sore?

Treat the first symptom (the hot spot) with Bag Balm®. This old fashion medication designed for a milk cow's sore and irritated teats (from too much frictional rubbing) is available at many pharmacies and animal supply stores. Lots of Bag Balm® applied to irritated areas immediately after your shower will usually result in recovery overnight. This will help heal the superficial wound and prevent its worsening while you're off the bike.

If using a goop originally developed for cow teats makes you uneasy, get a prescription for a strength topical steroid ointment such as Temovate®. There are side effects and dangers with frequent usage, and it costs ten to forty times as much as Bag Balm.

Whether you use Bag Balm or prescription steroid ointments, apply it in the evening, and cover it with Vaseline the following morning. If after riding several hours this area of irritation again appears, smear on more Vaseline.

STAGE 2: FOLLICULITIS

This looks like acne—small red bumps with puss-filled heads. These are found in hair follicles, and there's often a hair sprouting right out of the puss-filled bump. If this sounds like something you'd like to prevent, just ride with freshly laundered cycling shorts each day, and/or use lots of Vaseline. Topical antibiotic gel or oral antibiotics may help, too.

Note: If you start your rides with a clean crotch and a clean, Vaseline-covered chamois, and you reapply Vaseline daily, you can go a week or two without laundering your shorts. That's how good Vaseline is.

STAGE 3: ABSCESS

This is an infected, red, hot, swollen, tender bump that varies in diameter between about a third of an inch to two inches. These frequently scar over and may form sinus tracks with extensions going in multiple directions from the original lesion. In addition, cysts may form that totally surround the abscess after it has resolved, or may develop directly from the folliculitis stage without abscess development.

If an abscess occurs, quit riding until they're healed. Go to your doctor (whom you should have seen before now), who then may prescribe oral antibiotics.

SOAPS TIPS FOR FOLKS WITH PROBLEM CROTCH SKIN

Cetaphil®, Dove® or Purpose® soap. Wash gently, and moisturize with simple emollients like Eucerin Creme®, Aquaphor®, Moisturel®, Curel® or Bag Balm®. You may actively reverse irritant dermatitis by using over-the-counter 1% Hydrocortisone Ointment, or prescription hydrocortisone ointments.

A little TLC to the groin to prevent irritation and lots of Vaseline will keep you riding long and pain free.

I would like to graciously thank Harry Hurley, M. D., a superb academic and general dermatologist.—B.B.



Two of these products are just the ticket for preventing and treating saddle sores. The other two...are not.

Continued from page 1

ple of presentations at a PacTour (Haldeman/Notorangelo) riding camp. I got to ride my bike a lot, it was loads of fun, and I learned lots of stuff from lots of smart people. I got to ride with Eds Burke and Pavelka, and Fred Matheny—well known cycling journalists, been around forever; and Gladys from Bermuda—a new cyclist who sits bolt upright on a Cannondale hybrid and rides her bike mostly around the 2-mile by 21-mile island she lives on; and Andrea from Asheville—who needed her handlebars raised and rotated, and a seat post with more offset; and lots of others, including Lon, who rides a 61cm, 15+ year old middle-of-the-road lugged Reynolds 531 frame equipped with 170mm cranks, a 42t chainring and 13-14-15 rear cogs. No derailleur, but he's not trying to make a statement, he's just trying to get down the road without thinking too much about the bike or having to worry about something breaking down.

One early morning down there in Tucson, the Rocky and Bullwinkle show was on, and I'd forgotten how truly great a show that is. I got home and thought I'd see if I could buy the episodes on video. According to Amazon, there were 9 tapes, but they've gone out of print. Discontinued! Whose decision was that? I want them. Kate (11) and Anna (5) haven't even heard of Rocky and Bullwinkle, to say nothing of Peabody and Sherman, and Boris and Natasha. "Look, Bullwinkle—a message in a bottle!" And how does Bullwinkle respond? If you must respond, do so by postcard. See if that wins you anything, and if you're one of the first fifty, it just may. Don't expect.

On a whiny and beating a dead horse note, meaning I bring this up a lot, it really bugs me that none of the brake makers are making standard reach sidepull brakes, and that current short-reach dual-pivot brakes leave little to no room for fenders, even if you maximize the fork length and rear bridge height (which we do, but we are the exception) I would like to ask the brake makers this: Do you think it's better NOT to be able to put fenders on a road bike, or to ride with tires larger than 700x28? And I would like to suggest this: Dual pivots, fine; but please make them wider under the arches, to fit

fenders. The best thing would be to increase the reach of the brakes another 8 to 10mm. Also, why so many nearly identical brakes? Do we really need a Dura-Ace *and* an Ultegra *and* a 105 *and* a whatever is half a notch below that? A Campy Record *and* a Chorus *and* a Veloce *and* a whatever is a third of a notch below that? A plethora of price points and a paucity of practical designs, that's what it is.

For a week and a half or so, ending March 24, it was hard to get through to us by telephone. Here's why: We had one line set on Do Not Disturb, and for reasons far, far beyond me, that made it so incoming calls didn't trigger the ring on line one. Lines two and three rang, though, so the only calls we got were when line one was tied up but not ringing with an incoming call, and we had another call on line two or three before the person calling on line one hung up. The lines were quiet as all get out, and we were all worried. Things are better now, but we still need to get this *Reader* out.

We need, and will continue to need a few more employees to help out with shipping, filing, order entry, paperwork, and the phones. We have some resumes, but welcome more. If you're interested, and particularly if you're local, send your resume, salary requirements, and references to Jerome here. By mail or fax (925) 933-7305. Chances are the spot or spots will be filled by the time we get your resume, but if all goes well, we'll need more help in the future. There's no coasting; everyone has to pedal like mad, and How Much You Like Lugs doesn't matter as much as How Accurate & Efficient You Are Doing Whatever It Is You'll Be Doing. If you're interested, FAX or mail, don't phone. If this is the first editorial you've read, please duly note that the others were better. The next issue will be better, too, and will have some kind of an interview in it. I hope we get the guy we were supposed to have in this one. As always, I want to thank you all for your tremendous support over the years. The support comes in many forms—orders, letters, emails, jellies and preserves, and Louisiana crayfish. Don't Fed-X us any frozen orange roughly, though. Don't want it!—Grant

SADDLE SORES			
STAGE	DESCRIPTION	PREVENTION	TREATMENT
<u>HOT SPOT:</u>	RED, SWOLLEN, BLISTERED OR SUPERFICIAL DENUDED BUMP	SADDLE HEIGHT VASELINE NO UNDERWEAR SPECIAL SHORTS	BAG BALM@ OR TEMOVATEQ (WITH CARE)
<u>FOLLICULITIS:</u>	MULTIPLE RED, OFTEN PUS FILLED, ACNE LIKE BUMPS	ALL OF THE ABOVE EMGEL® CLEAN SHORTS	EMGELQ BENZOYL PEROXIDE ORAL ANTIOTBIOTIC
<u>ABSCESS:</u>	LARGE, RED, HOT SWOLLEN, PUS FILLED BUMP	ALL OF THE ABOVE	STOP, REST ORAL ANTIBIOTICS INCISION & DRAINAGE OR WARM COMPRESSES EXCISION IF CYSTIC NODULE PRESENT AFTER ANTIBIOTICS



CLASSICS



In each issue we'll look at a classic bicycle component or accessory. Since there's no actual definition of "classic bicycle component or accessory," for our purposes here, we'll define it as one that was made for at least 8 years, virtually unchanged, and regardless of whether or not it is still made, makes as much sense now as it did when it was born. (Shimano is arguably the best and undeniably the most successful component maker of all time, but has yet to make a classic—not to imply that it has tried, or even cares to, or even should care to. It's just an observation.) We'll kick this feature off with the Grampa Champion of All Classic Bicycle Components, and one with an equal number of fans and detractors: The...

T.A. CYCLOTOURIST CRANK

T.A., a French company whose initials stand for Traction Avant (front traction) made the first aluminum bicycle crank in 1947, and the top racers of the time used it. Bobet, Walkowiak and Anquetil used it when they won their Tours de France from 1953 through 1957. They all used rod- (not cable-) actuated front derailleurs, too, just to put this into perspective. If there's a coelacanth of bike parts, this is it.

Touring was big in France at that time, too, and a three-ring version of this crank, dubbed the CycloTourist, became the tourist's favorite from the early '50s through the mid '70s. It's as good now as it ever was, but modern forces have scared it back into its hole in France, and now relatively few ever see a bike shop display, much less, a new bike.

For 50 years, the T.A. Cyclotourist has been available in twelve crankarm lengths: 150, 155, 160, 162.5, 165, 167.5, 170, 172.5, 175, 177.5, 180, and 185mm. Before we all whine about the lack of a 152.5, 157.5, or a 182.5, consider that a typical modern crank usually comes in 170 and 175 only. Sometimes there's a 172.5, sometimes a 180, but usually not.

For the CycloTourist, you can get chainrings from 26t to 68t, mostly in 1-tooth jumps! Every good pre-1978 tandem had these cranks. The best early mountain bikes had them. Even track riders rode them. T.A. offered an adapter to allow you to fit racing chainrings from other companies, even. The versatility proved to be an advantage to just about everybody.

If that's not enough, the CycloTourist has the lowest Q-Factor of any crank I'm aware of. You can set up a road double as low as 134mm; a road triple as low as 139mm; and if your frame allows, a mountain triple as low as

142mm—less than a current "pro" road double. The design of the right crank arm allows you to fit single, double, or triple chainrings simply by using the correct bolts and spacers (for single, double, or triple rings).

What's truly amazing is the fact that the T.A. CycloTourist is still being made, that somehow, T.A. hasn't been bought out by, or turned control over to a bunch of insecure, cutting edge guys who live to bury the tradition just because it reminds them that they weren't part of it. The guys who take over companies and wipe the slate clean so they don't have to do any history homework.

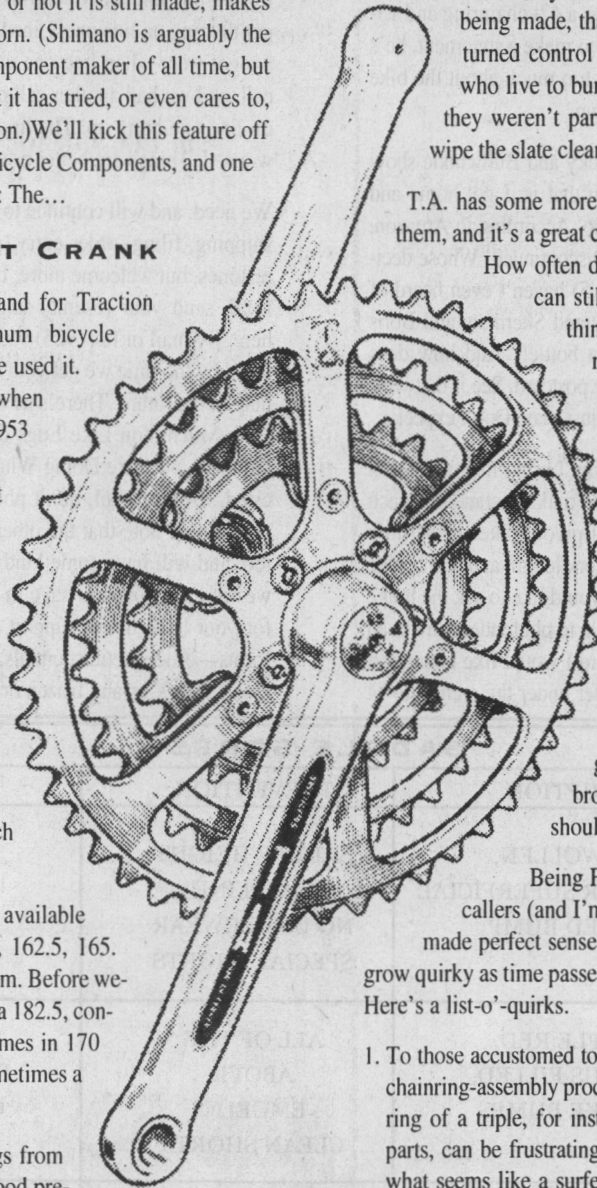
T.A. has some more modern designs—the Zephyr we sell is one of them, and it's a great crank—but they exist alongside the CycloTourist.

How often does THAT happen these days? So anyway, you can still buy a 150mm crank, or a 162.5mm—or anything normal you might want. You can still get a 33t ring, or a 68t. T.A. also makes available solid chainrings—flat, round discs with teeth and bolt holes, or fancy people who want to cut out their own ornamentation. I've seen these in bike shops in Tokyo, but not over here. But I've no doubt that they can still be had.

The CycloTourist is not just clever and versatile; it's also strong. Mel Pinto, the closest thing the bike industry has to Buddha, has been importing this crank for more than 40 years, and claims he's never seen a broken one. I'm sure some have broken—not all reports go back to Mel. But I've never seen or heard of a broken one, either, and so at the very least, we should agree that it is reliable.

Being French, it has its quirks, but the things the quirk-callers (and I'm among them) regard as quirky about this crank made perfect sense when the crank was a rookie, and only seem to grow quirky as time passes, and we become accustomed to other standards. Here's a list-o'-quirks.

1. To those accustomed to typical modern crankarms with relatively simple chainring-assembly procedures (and integral threaded spiders for the inner ring of a triple, for instance), and lack of instruction typical of French parts, can be frustrating. But underneath the surface of confusion, amid what seems like a surfeit of bolts, washers, and spacers, lies a basically simple and straightforward system which uses different length bolts for single, double, or triple chainring set-ups.
2. You assemble the chainrings together while they're off the right crank/spider. THEN you use the stubby little bolts to mount the chainring assembly to the right crank. Don't try to assemble the rings on the spider, as is normal these days.



3. The crank threads are larger in diameter than the industry standard, and require a T.A. or at least a T.A.-sized crank puller. If you want to see a blank stare n' a jaw drop, and a quick lateral, go into a modern bike shop and ask Young Laddy behind the counter for one of those. Park makes a two-sided universal puller, meaning T.A. on one side, everything else on the other, but most shops just carry the single puller, since folks who don't have a T.A. crank won't be interested in the other side, or paying for it. Mel Pinto has real T.A. pullers. Any dealer ought to know who Mel is.

4. The cranks come with pedal washers. This is a "quirk" only because T.A. is the only crank maker thoughtful enough to provide them. They fit between the pedal and crank arm, and prevent the pedal from scarring up the crank when it's tightened. Don't be bummed or get too paranoid if your crank doesn't have pedal washers (and if it ain't a T.A., it don't). But do appreciate T.A.'s thoughtfulness for this feature, and its stubborn pursuit of gentle pedal/crankarm interfaces, even in times when the market not only isn't demanding pedal washers, but for the most part has never even heard of them.

5. The gap between the outer chainring and the inside of the right crankarm is only 7.5mm. It was designed to work with narrower cages than what most derailleurs come with. I've seen XTR front derailleurs work on this, but you have to nail the cage angle, and it takes some trial-and-error. I ride mine with a Dura-Ace front, and it works perfectly.

The T.A. Cyclo-Tourist is 50+ and still going strong in Japan and Europe, especially among touring cyclists who like its quality, great looks, reliability, versatility, and knowing they'll be able to buy parts for it 20 years from now. The market here is different. In the U.S., tourists—for the most part—get racing and mountain bike leftovers.

I have this crank on my old tandem, and recently put a new one on my LongLow. A triple CycloTourist set-up (two crank arms, 3 rings, and all that mounting hardware) costs about \$275 to \$285, and then you need a bottom bracket. T.A. offers a traditional cup-and-cone model (retail cost about \$50, and available in a wide range of spindle lengths to suit any frame), but a Phil seems to fit better, and allows you to shift the whole assemblage left or right to gain chainring clearance, or make your left and right Q-factor (how far our the crankarms sit) symmetrical... if you're into that.

Where can you get one? Not here, not yet. Frankly, as much as we love this crank (and all of us here do), we're chicken to stock it. We know from experience that if we offer it in 165, 170, 172.5, and 175mm crankarms, we'll get a good number of requests for 167.5s and 177.5s. And if we sold any number of them, we'd be phone-coaching people through the assembly, while they're growing increasingly frustrated and their spouses are writing notes to them, saying, "Just send it back!"

If you really want one and are willing to wait for delivery and work with its quirks, we'll order it for you. Or ask your best local shop to order it for you. Tell them to get it from Mel Pinto. If they ask, "Who's he?", you're in the wrong shop. If they say, "Well, duh...who else?", you've got a winner. A rude one, but a winner.

Four Questions To Ask Yourself Whenya Shop For a New Bike

(Don't count on anybody else asking for you.)

ONE

"If I break a rear wheel spoke, will I have to walk home?"

Look at the side clearance between the tire and chainstays. If you can't stick a pencil in there, carry sneakers.

TWO

"Will I be able to ride it all year round?"

If it rains where you ride, make sure there's room for fenders. Fenders generally like *two* pencils between the top of the tire and the metal above it.

THREE

"What's the largest tire the frame will accept?"

A bike that won't take a 700x32 will limit you to smooth roads. You'll be riding on iron-hard air. Supple casing or no, your 700x21s are not cushy when pumped to 130 psi. Bad roads and 190lb riders need 700x32s.

FOUR

**"How far below the top of the saddle
do I want the top of the handlebars to be?"**

The most comfort-enhancing adjustment you can make is to get the top of the handlebars within a centimeter or so of the top of the saddle. For long, flat rides, a centimeter or two above it might be better yet. On any bike you might buy, set the saddle height. Raise the bars up as high as they'll go without exceeding the Maximum Height marking. Higher bars mean you'll carry less weight on your hands and arms. Your back won't get as sore. Your neck won't get as stiff. You'll be more comfortable while you ride and your back won't nail you the morning after.

Shop in a smart manner.

Look for good clearance and high-enough bars.

Rivendell Bicycle Works

1561-B Third Avenue

Walnut Creek, CA 94596

www.rivendellbicycles.com



THE GREAT AMERICAN BIKE BOOM



by Frank J. Berto

© Frank J. Berto

Introduction



he Great American Bike Boom lasted from 1972 to 1974. Annual U. S. bicycle sales jumped from seven million to fourteen million for three years and then dropped back to seven million.

It was the most significant event since the first Bicycle Boom at the end of the 19th century. After the Great American Bike Boom, America rather than Europe, was the main market for quality derailleur bicycles and the center of gravity of the world's bicycle industry shifted from the Atlantic to the Pacific.

British and French bicycle makers, such as Raleigh, Peugeot, Motobecane, and Gitane had dominated the quality bicycle market for decades. After 1974, Japanese bicycle makers, like Fuji, Bridgestone, Panasonic, and Takara became the major exporters.

Similarly, French and Italian companies such as Simplex, Huret, and Campagnolo had dominated the bicycle component market. After 1974, they went into serious decline and Japanese component makers, like SunTour, Shimano, and Sugino took over the export market.

Conventional wisdom is that the Great American Bike Boom was caused by the oil shortage and the recession that followed the Arab-Israel war.

This is not true. The Arab-Israel war began in October, 1973 and the lines at the gas stations came at the end of 1973. The bike boom was three quarters over and bike sales were winding down for the winter. The best that can be said about the oil crunch was that public concern over the energy crisis kept the boom going for an extra year.

A better case can be made that the oil crunch ended the bike boom. The combination of high unemployment and high inflation that followed the oil crunch caused the "Carter" recession. The slump in discretionary spending decimated the market for expensive imported bicycles as American buyers switched to cheaper domestic models. In 1974, the last year of the bike boom, U. S. bicycle production rose while imports dropped.

No bicycle book written after 1974 explains the cause of the Great American Bike Boom. No one predicted it before it happened and no one properly explained it after it was over.

The High-Rise Bicycle Caused the Great American Bike Boom

The true cause of the Great American Bike Boom was the surge in sales of "High-Rise" bicycles in the last half of the 1960s. The high-rise bicycle overcame the cultural refusal of American high school students (15+ years old) to ride bicycles. The high-rise fad lasted for about a decade and it vastly expanded the number of teenagers riding bicycles. Somewhere between

U.S. BICYCLE SALES AND PRODUCTION

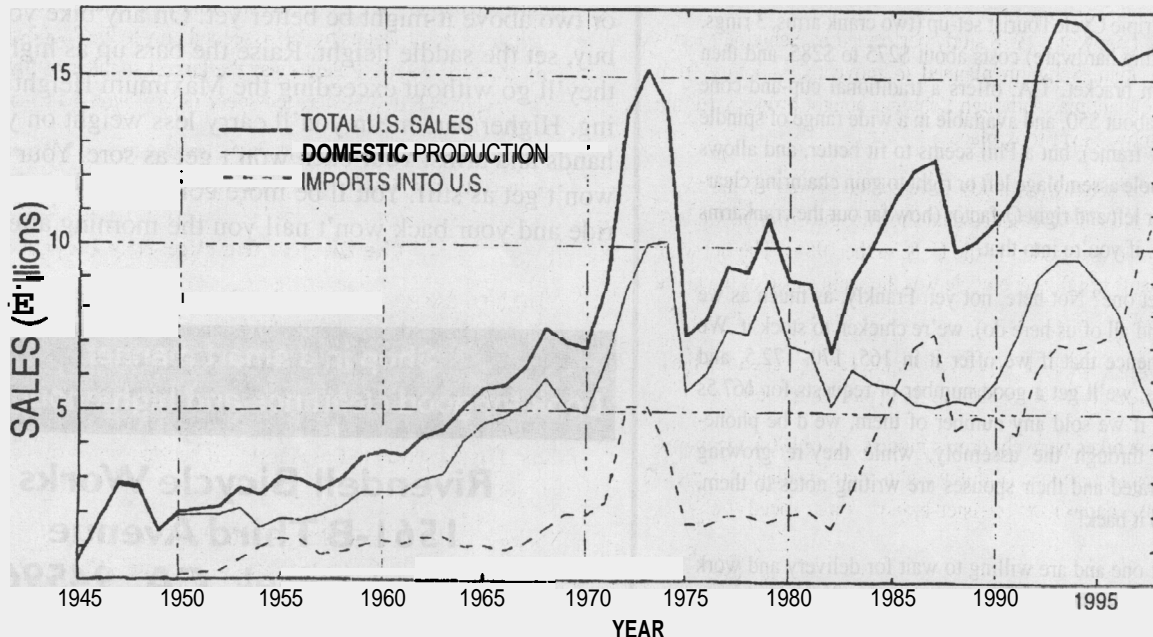


Table 1. U.S. Bicycle Sales — 1945 to 1998. The three bike boom years, 1972, 1973, and 1974, are clearly an aberration from the long-term trend.

ten and twenty million of these teenagers graduated from high rise bicycles to ten-speed bicycles. This caused the huge spike in bicycle demand. Everything else was incidental.

In the early 1960s, the American bicycle market had two key characteristics. First, it was a kid's market and second, kids stopped riding bikes at about age 15.

In the early 1960s, the standard American bicycle was a one-speed, coaster-brake, balloon-tired "tank" that weighed about 50 pounds. It was styled to look like a motorcycle to appeal to the juvenile market. In the 1950s, Schwinn had converted the market from heavyweight bicycles with 2-1/8 inch wide tires (heavy tanks) to middleweight bicycles with 1-3/4 inch wide tires (medium tanks.)

Schwinn introduced the Varsity 8-speed derailleur bicycle in 1960. A few years later, the Varsity soon became a ten-speed. It was the first widely sold derailleur bicycle in the U. S and it proved that there was a market for inexpensive American-made ten-speed derailleur bicycles. Schwinn dealers had a derailleur demonstrator to help overcome doubts about the new-fangled devices.

Schwinn expanded its range of derailleur models each year. By 1965, Schwinn dealers had \$69.95 Varsitys, \$89.95 Continentals, \$99.50 Sierras, and \$129.50 Superiors. The pride of the store was the \$237.00 Paramount.

Most Varsitys were sold to teenagers. In the early 1960s, adults bought fewer than 5% of the bikes sold - fewer than 200,000 bikes per year. There was no mechanism to determine the ages of bicycle buyers, so this is simply my estimate.

Major changes took place in the American bicycle market in the middle 1960s, but these changes were not apparent from the published sales data which showed just three categories, domestically-made bicycles, imported bicycles, and total bicycles sales.

In 1999, I obtained a copy of a 1978 study performed by Schwinn to support a major bank loan. Schwinn planned to move their factory from Chicago to Tulsa, Oklahoma. Although Schwinn bought property for the Tulsa factory, the move never took place.

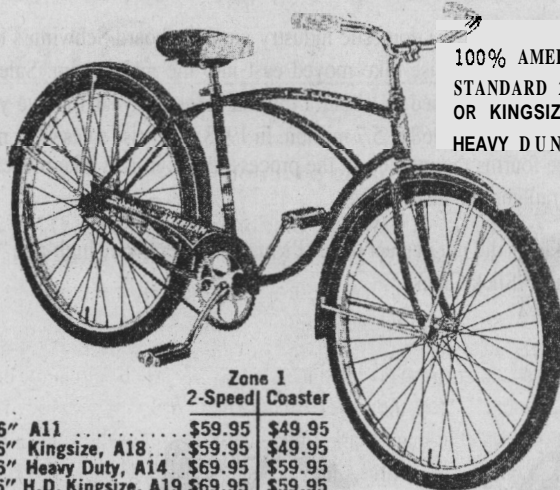
The first section of the Schwinn study covered the history of the U. S. bicycle industry up to 1977. It included data showing the different kinds of bicycles that were sold and ridden in the U. S. in the 1960s. The Schwinn study concluded that the high-rise bicycle was the main cause of the Great American Bike Boom.

U. S. bicycle sales grew about 10% per year in the 1960s. Per capita bicycle sales went from 20 per 1000 in 1961 to 35 per 1000 in 1969.

Before 1963, 20-inch bikes were children's models. After 1964, the majority of them were high-rise bikes. Middleweights were standard American bikes. Lightweights had either coaster-brakes, three-speed hubs, or derailleur gearing.

The 20-inch category replaced the middleweight in this decade as the youth market switched to high-rise bikes. In 1961, middleweights had 60% of the market and 20-inch children's bikes had 14%. By 1968, middleweights had only 11% of the market and 20-inch bikes had 76%. The

THE *Schwinn* AMERICAN



100% AMERICAN!
STANDARD 26"
OR KINGSIZE!
HEAVY DUN, TOO!

		Zone 1	
		2-Speed Coaster	
26" A11	.....	\$59.95	\$49.95
26" Kingsize, A18	.....	\$59.95	\$49.95
26" Heavy Duty, A14	.....	\$69.95	\$59.95
26" H.D. Kingsize, A19	.....	\$69.95	\$59.95
24" A21	.....	\$56.95	\$46.95
20" A31	.....	\$	\$44.95

Radiant Red, Blue, Black; Radiant Green 26" Size only.

Figure 1. The 1962 Schwinn American was a typical middleweight bicycle. It came in three wheel sizes. 20-inch wheels were for beginners. 24-inch wheels were for 11-year olds. 26-inch wheels were for teenagers.

large majority of the 20-inch bikes were high-rises.

The lightweight category bounced along at about a million bicycles per year. These were not lightweights by today's standards, because the category was defined by tire size.

TI-Raleigh's decision to get out of the mass market business was the main cause of the drop in imports after 1964. Raleigh's exports dropped from 800,000 in 1963 to 100,000 in 1965. From 1965 onward, Raleigh concentrated on building a U. S. network of franchised Raleigh dealers.. They had more than 1400 dealers by 1973, second only to the 2000 Schwinn dealers. By the early 1970s, Raleigh was the largest supplier of lightweight bicycles and most Raleighs were ten-speed racers rather than 3-speed roadsters.

The market switch to high-rise bicycles was the second cause of the drop in imports. It took the exporters a while to get into the high-rise market.

The Birth of the High-Rise Bicycle

The high-rise story began in San Diego in 1963, when kids started taking used 20-inch wheel juvenile bikes and equipping them with "longhorn" handlebars, "banana" saddles and "sissy" bars to support the rear of the saddle. The San Diego kids called them "pig bikes." Many parents thought that they looked stupid - making them even more attractive to their owners. The fad spread to Los Angeles. It became kid brother's version of big brother's hot rod.

Schwinn's West Coast dealers noticed the booming sales of these exotic parts and reported the activity back to Schwinn's Chicago headquarters. Al Fritz, an engineer in Schwinn's management, recognized the potential and convinced Schwinn to make a trial batch of high-rise bicycles. It was a huge success. Schwinn's name "Sting-Ray" became the second name for

the breed. Schwinn started making Sting-Rays in mid-1963 and they sold 45,000 by the year end.

In 1964, the rest of the domestic industry jumped aboard Schwinn's band wagon and the high-rise bike moved east into the mainstream. Sales of high-rise bikes increased by about a million bikes per year for five years until they peaked in 1968 at 5.7 million. In 1968, high-rise sales were more than three fourths the market. In the process, the high-rise bike picked up a rear derailleur and hand brakes.

The marketers did not neglect the girl's market. There were high-rise "Fair Ladies" and "Slick Chicks."



Figure 4. Foreign bike makers eventually caught on to the trend and nearly a million high-rise bicycles were imported in 1968. The Raleigh Chopper didn't appear in the U. S. until 1970, when the high-rise fad was fully mature. It was a huge success in Britain and in Europe. The Chopper used the frame from the RSW16 (Raleigh Small Wheel-16-inch), which was developed from the Moulton. This was the only connection between the 1960s small wheel bikes in Europe and the U. S. high-rise bicycles.

The high-rise replaced the middleweight bicycle in the 1960s. This wasn't particularly important - just another American fad. The change in the teenage mind set was important. In the early 1960s, only "nerds" rode bicycles to high school. In the late 1960s, millions of American teenagers rode their high-rise bikes to school because they were "cool." Riding a high-rise bike to high school was the "in" thing to do. With just a bit of practice, you could "pop a wheelie" and ride the bike on the back wheel indefinitely.

Young Americans kept riding bicycles past their teens.. The 20+million high-rise bikes that were sold in the eight years preceding the bike boom created the millions of youthful riders who were the main buyers of ten-speeds during the bike boom. The 1978 Schwinn report concluded,

"This dramatic increase in "adult" style 26 and 27-inch wheel multi-speed bicycles is attributable in large part to youth riders in the 13 to 17-year old segment of the population, graduating from the high-rise bicycle to the sophisticated derailleur-equipped lightweight bicycle."

Significant Years In the Great American Bike Boom

1970. U. S. bicycle sales trended down a bit from 7-1/2 million in 1968 to less than 7 million in 1970. About 12% of the sales (820,000), were derailleur-equipped lightweight bicycles. About 60% of the derailleur lightweights were imported and 40% were domestic. The term lightweight is relative because most of the domestic bikes were Schwinn Varsitys which weighed more than 40 pounds.

1971. The bike boom began in 1971. Nearly 9 million bicycles were sold. This jump in bicycle demand was a complete surprise, especially the trebled sales of ten-speeds. By middle of 1971, U. S. bicycle makers had orders that exceeded their entire production capacity for the year. Schwinn dealers were on allocation from May, 1971 through 1974.

The market breakdown was 4.1 million high-rise bikes and 3.7 million lightweights. Sales of imported lightweight bicycles tripled. Ten-speed bicycles were in short supply and everything that was available was quickly sold at a handsome profit. This attracted newcomers to import, distribute, and sell ten-speed bicycles.

1972. Nearly 14 million bicycles were sold in 1972, amounting to 66 bicycles per 1000 population. The domestic U. S. manufacturers worked overtime to produce to 8-3/4 million bicycles. Sales of imported ten-speeds tripled again and imports took 37% of the market.

1973. This was the peak boom year and more than 15 million bicycles were sold, amounting to 72 bicycles per 1000 population. Domestic U. S. production increased to 10.1 million. More than 5 million imported bicycles were sold in 1973, the same number as in 1972. Overseas factories that could make ten-speeds were at capacity or they were limited by component availability. The import market share dropped back to 34%.

In 1973, Fortune magazine estimated that the revenue from bicycle manufacture rose from \$350 million to \$750 million and that profits rose from \$14 million to \$30 million. In 1972 and 1973, U. S. consumers bought more bicycles than automobiles.

1974. "Only" 14.1 million bicycles were sold, amounting to 67 bicycles per 1000 population. Domestic U. S. production increased to 10.2 million but less than 4 million imported bicycles sold. The market demanded cheaper bicycles. The best sellers were inexpensive domestic "gas-pipe" bicycles with 26 x 1-3/8-inch rather than 27 x 1-1/4-inch tires. ("Gas-pipe" is a pejorative to describe heavy, low quality, seamed frame tubing.)

1975. The bike boom collapsed and total sales fell to just over 7 million. This included 2.2 million high-rise and BMX bikes. Domestic sales dropped to 55% of 1974-75 peak. The importers took a blood bath with sales of only one third of 1975.

Review of the Great American Bike Boom

It was a "three-year wonder." By 1975, sales were back on the long term trend line. Comparing 1970 with 1975 reveals the decisive change in the market. The derailleur ten-speed became the dominant bicycle. Sales went from less than a million in 1970 to 8-million in 1974-75 at the peak of the bike boom. After the bike boom, ten-speeds had at least 40% of the market until the mountain bike took over. The number of adult riders grew significantly.

Three million or so 20-inch bicycles were sold each year right through the bike boom. By the end of the bike boom, the high-rise bicycle was being displaced by the 20-inch BMX (Bicycle Moto Cross) bicycle with the same wheel size.

Figure 6. 1976 Mongoose BMX bike. In 1976, more BMX than high-rise bicycles were sold. Small companies like Mongoose and Red Line got most of the business. Schwinn missed the trend because their lawyers told them that BMX racing was dangerous.

The Bike Boom Bikes

Some decent ten-speed bicycles were sold during the bike boom. It took a few years to educate bicycle buyers that a \$300 lugged-frame bicycle with Campagnolo components was worth four times as much as a Simplex-equipped gas-pipe bicycle.



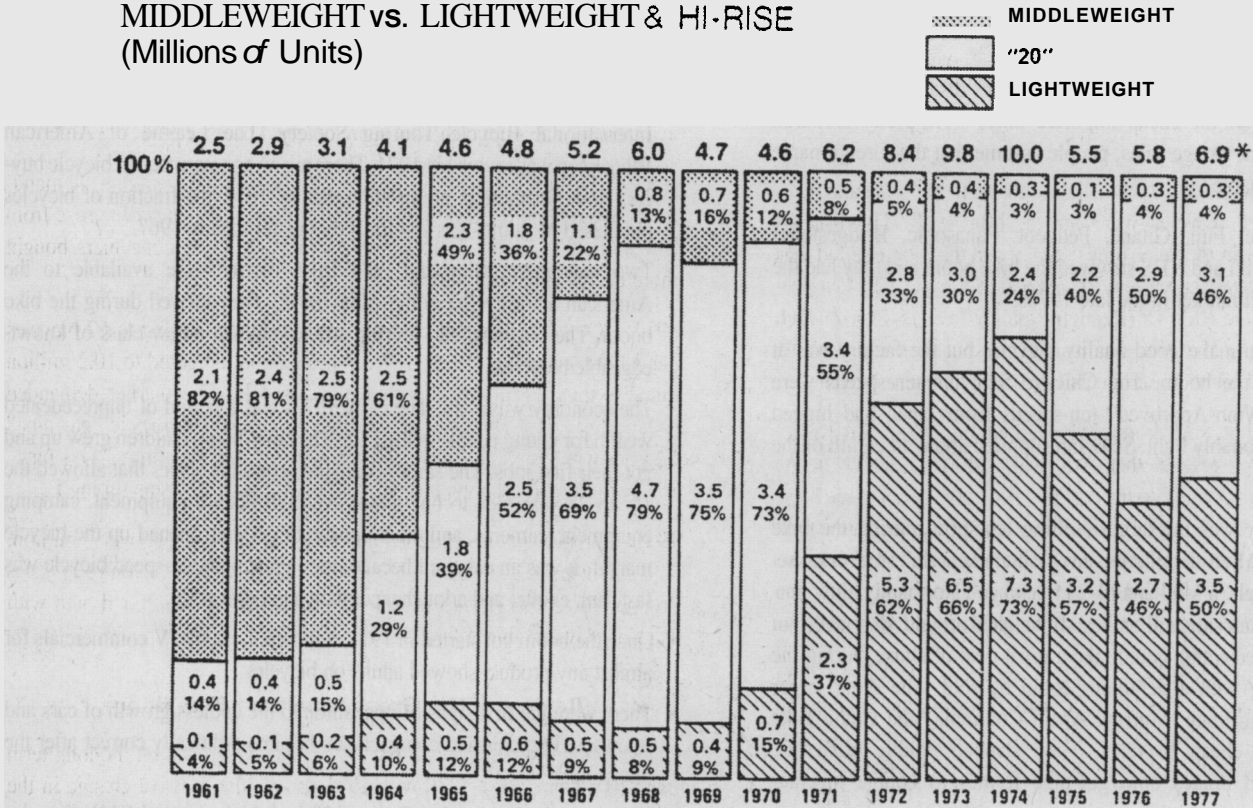
The dividing line was about \$125.00. If you paid less, you got a poor bargain. If you paid a bit more, you could

buy a fairly decent ten-speed.

In the early 1970s, Raleigh was the major importer. Motobecane, Peugeot, and Gitane had smaller dealer networks. When these traditional suppliers ran out of bicycles in 1971 and 1972, bicycle makers from around the world rushed in to fill the void. The old magazine advertisements included showed the following names and countries.

- Steyr (Austria).
- Flandria and Superia (Belgium).
- Caloi (Brazil).
- Dawes, Falcon, Holdsworth, Lambert, Mercian, Moulton, and Raleigh (Britain).
- CCM (Canada.)
- BKC (Denmark).
- Bertin, Cazenave, Ficelle, Flandria, Follis, Gitane, Jeunet, LeJeune, Liberia, Mercier, Michard, Motobecane, Paris Sport, Peugeot, St. Etienne, Star France, Stella, Sutter, and Velo Sport (France).
- American Arrow and Kalkhoff (Germany).
- Ancona, Batavus, Eroba, Gazelle, Magneet, and Pegasus (Holland).
- Atala, Bianchi, Bottecchia, Bugatti, Chiorda, Cortina, Frejus, Fiorelli, Italvega, Legnano, Maserati, Moretti, Vanquer, Urago, and Veloce (Italy).
- Azuki, Bridgestone-Kabuki, Centurion, Chimo, Ferrare, Fuji, Nishiki, Panasonic, Sekai, Sekine, Takara (Japan).

**DOMESTIC BICYCLE SALES
MIDDLEWEIGHT vs. LIGHTWEIGHT & HI-RISE
(Millions of Units)**



** Total 3 Categories

Table 2. Schwinn Data showing U. S. Bicycle Sales from 1961 to 1969. It shows the three main categories of bicycles — 20-inch (wheels 20-inch and smaller in diameter), Middleweights (1-3/4 inch and wider tires,) and Lightweights (Tires narrower than 1-3/4 inch.) The categories were those used by the BMA (Bicycle Manufacturers Assn.)

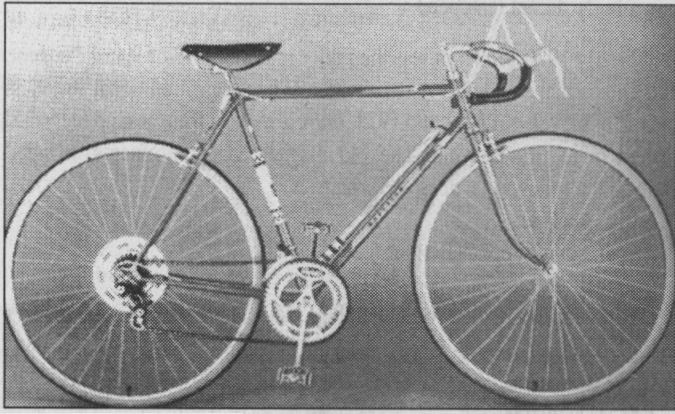


Figure 7. 1974 Peugeot UO-8, a \$100 French 10-speed with Simplex derailleurs, cotted steel crank, Atom 5-cog freewheel, Normandy alloy quick release, high-flange hubs, Mafac center-pull brakes, steel rims. Lightweight unbutted tubing kept the weight to 28lb. (Editor's note: The near-equal heights of bar and saddle on this 23-inch/58.5cm frame guaranteed comfortable for a rider between 5-9 and 5-10. Barely a fistfull of seat post—extreme even by our standards, but not too dumb.)

Windsor (Mexico).
 DBS (Norway).
 Zeus (Spain).
 Crescent (Sweden).
 Mondia (Switzerland).
 KHS (Taiwan)

The bubble burst in 1975, and most of these names disappeared from the U. S. market. Many of the cheap imported bikes were pretty dreadful. When they show up at garage sales, people assume that the foreign name must make them valuable.

Raleigh, Motobecane, Fuji, Gitane, Peugeot, Panasonic, Bridgestone-Kabuki, Takara, Nishiki and KHS survived the bike boom and they had the majority of the import market in the late 1970s.

Schwinn continued to make good quality bicycles but the factory was at capacity throughout the boom. The Chicago Schwinn ten-speeds were heavy but the "Schwinn-Approved" ten-speeds from Japan had lugged frames and were reasonably light. Schwinn supplied about an eighth of the bike boom market.

The Schwinn Varsity was the largest selling ten-speed during the bike boom. It had Huret Allvit derailleurs, an "Ashtabula style" steel crankset with 52-39 chainwheels, a Maillard 14-28 freewheel, Normandy alloy nutted hubs and Weinmann side pull brakes. It weighed around 40 pounds but the heavy flash welded frame could take a great deal of abuse. During the bike boom, anything with a derailleur could be sold. The other larger American makers, Huffman, Murray, AMF, Columbia, and Chain Bike (Ross) churned out cheap bicycles. They slapped double cranksets, derailleurs, and hand brakes onto gas-pipe frames to cobble together \$75.00 ten-speeds.

Some of these were truly horrid. In the worst cases, the derailleur was attached to a frame designed for a coaster brake. The derailleur was held to axle by a big star washer. Rear wheel removal was almost impossible. This

class of bicycle was sold by department stores or auto supply stores, often partly assembled in the carton. Even if the bikes were assembled, the department store mechanics could not adjust or repair them.

What Else Contributed to the Great American Bike Boom?

The U. S. bicycle market is characterized by fads and by boom and bust cycles. However, in the long term, it has been a growth market. From the 1920s, bicycle sales have grown faster than the population. Per capita bicycle sales grew from 7 per 1000 in 1920, to 12 per 1000 in 1946, to 35 per 1000 in 1969, to 70 per 1000 in 1998. Without the bike boom, eight million or so bicycles would probably have been sold in 1976.

Youth graduating from high-rise bicycles were the main cause of the bike boom. However, a number of other factors converged in the early 1970s. This convergence of factors led to the buying frenzy for ten-speed lightweight bicycles from 1971 to 1974.

- Imports of lightweight bicycles (mostly "English racers") had been slowly growing since the 1950s. Sales of derailleur-equipped bicycles were also growing, aided by the success of the 1960 Schwinn Varsity.
- The adult bicycle market was slowly growing. Adult Americans became more interested in physical fitness and bicycling for health and recreation became popular. A band of dedicated pioneers laid the ground work for public acceptance of bicycles as adult recreational vehicles rather than children's toys. Dr. Paul Dudley White, Eisenhower's personal physician, preached the gospel of regular exercise.
- The American Youth Hostels organized multi-day bicycle tours and trained cyclists to lead bicycle tours. Dr. Clifford Graves founded the International Bicycle Touring Society. The League of American Wheelmen was revived in 1974. There are no age statistics on bicycle buyers. However there is no question that by 1974, the fraction of bicycles purchased by adults was significantly greater than in 1967.
- Two magazines, *Bicycling!* and *Bike World*, were available to the American adult cyclist in the early 1970s. They thrived during the bike boom. The technical and touring articles created a new class of knowledgeable bicyclists.
- The economy was right. The early 1970s was a period of unprecedented wealth for young people in the U. S. The baby-boom children grew up and got their first jobs. The same social and economic forces that allowed the 15- to 25-year olds to buy expensive high-fidelity equipment, camping equipment, cameras, and other consumer goodies opened up the bicycle market. It was an easy sell because the lightweight ten-speed bicycle was fast, fun, exotic, and a lot cheaper than a good hi-fi set.
- Once the boom got started in 1971, it fed upon itself. TV commercials for almost any product showed adults on bicycles.
- There were the first signs of opposition to the endless growth of cars and freeways. Bicycles and compact cars became politically correct after the oil shortage.
- Kids still bought bicycles. Sales of 20-inch high-rise and BMX bicycles held at around four million right through the bike boom. These sales added to the totals.

Why the Bike Boom Ended

In 1974, the Arab oil embargo and the ill conceived government price controls converted the good times into inflation, high interest rates, and high unemployment. The harsh economic climate worked against discretionary purchases.

A huge inventory of unsold bikes hung over the market. These were sold at distress prices as the weakly financed importers and dealers went out of business. There was little money for bicycle advertising.

The 23 million ten-speeds sold during the bike boom far exceeded the total number sold prior to the bike boom. Most of them were low quality gas-pipe bicycles that were unpleasant to ride and impossible to maintain. They showed up second hand at dirt cheap prices, ruining the profitability of new bicycles.

By the late 1970s, the buying public knew a lot more about bicycle quality. Japanese imports were recognized for quality and Japan took over the low and middle-priced market for both components and bicycles. French bicycle and component companies fell on hard times.

Adding insult to injury, the U. S. Consumer Product Safety Commission (CPSC) promulgated a mandatory Federal Bicycle Safety Regulation in 1976. The regulations contributed almost nothing to bicycle safety but they raised costs and succeeded in putting the small domestic bicycle makers and the small importers out of business.

The CPSC locked the barn when the horse was in the next county. The short-wheelbase high-rise bicycle was a tricky little beastie. The front brake could lock up the small front wheel and pitch the rider on his face. An overdone "wheelie" landed the rider the back of his head, and this was before bicycle helmets. The sissy bar was often extended into a back rest which made mounting and dismounting a challenge. Finally, the stick shift was located to do serious harm to the reproductive apparatus in any kind of sudden stop. By the time the CPSC regulations came into effect, the high-rise bike had been replaced by the BMX bike.

Comparison with the First Bike Boom — 1890 to 1899

I call it the Great American Bike Boom to distinguish it from the first bike boom of 1890 to 1899. The first bike boom was different because:

- The first bike boom was driven by new technology. The "standard" bike of the first bike boom was a chain-driven, diamond-frame safety with pneumatic tires. It weighed less than 25 pounds. It was much more practical than the 1880s bicycle, which was a high ordinary with solid rubber tires that weighed more than 40 pounds.
- The first bike boom was world-wide, and bicycle production soared in both America and Europe. World sales went from a few hundred thousand in the 1890 to five million or so in 1895. The Great American Bike Boom was a purely American phenomenon.
- The first bike boom saw the price of an average bicycle fall from \$120 in 1890 to \$45 in 1895, as mass production and competition took over. This was still not cheap. These prices should be multiplied by about 50 to correct for inflation. After the first bike boom was over, prices kept falling to about \$15 in 1908. Bike prices rose significantly during the Great American Bike Boom.

- The 1890s was a virgin market. Most buyers were buying their first bicycle.

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Figure 8. The 1974 Fuji Tourer was a typical low-priced Japanese ten-speed. It had SunTour derailleurs, a Sugino cotted steel crankset with 50-40 chainwheels, a SunTour 14-34 freewheel, a Sunshine alloy quick release, high-flange hubs, and Dia Compe center-pull brakes. The Fuji still weighed more than the Peugeot but the heavier frame could take more abuse. Even though the gear spread was much wider, every writer commented on the smooth shifting SunTour derailleurs.

ATLANTIS INFORMATION & AN UPDATE

We recently visited Toyo, the Atlantis maker, and here are some notes from that visit.

Toyo has been building frames for almost 30 years. The President's name is Mr. Ishigaki, now retired but still semi-active in the business, which is run by his 32-year old son, Tetsu Ishigaki. "Tetsu" translates to "steel," but that is a coincidence....Tetsu learned to braze 20 years ago (at 12), taught by his then next-door neighbor, the renowned framebuilder, Nagasawa, who's best known for being the guy who built the frames for Koichi Nakano, the track sprinter who won a phenomenal 10 straight world championships from the mid-'70s to mid-'80s.

Anyway...we'd hoped to receive our first shipment of frames by the end of April, but mid-May is more likely. The hangup is in paint. The painter, Uemura, is a small company in a small shop, and has the reputation as the best painter in all of Japan, so naturally, it has more business than it can handle already. We told

them we'd send them 30 frames, but demand has been higher, so our first order is for 125. We're working on a Plan B, maybe a local painter, to take some of the load. We'll update you when you call, or click on www.rivendellbicycles.com and go to the Atlantis button.



Tubeing: A mix of Reynolds and a really fine Japanese tubing that you haven't heard of, but Tetsu says it's as good as Prestige was, so that's good enough. This is new. We didn't know of this tubing until recently. Yes it has a name. It's kind of a funny one, though: Starlight. Although the prototype here has a Reynolds sticker on the fork and seat tube, the real one won't. Also, the real one will have a hole in the crown, a third set of bottle braze-ons, a creamer (less white) head tube, and slightly lighter paint. In shooting the pictures, I overexposed to lighten the paint, which may make the white look even whiter than it is. The overall look is really great, though. The blueish green-grey color, even though it's too dark right now, still looks great. Even folks with bad taste like it!



WE HAVE NINE ATLANTIS DEALERS

Yes, there are still dealers who like smart bikes, lugs, and who don't mind selling something that isn't supported by a media blitz. We're picky about who sells our bikes, and the ones below are good bicycle people. Their prices and ours will be pretty much the same, and we encourage you to patronize them:

1. **California.** Cupertino Bike Shop in Cupertino
(408) 255-2217
2. **California.** Jitensha Studio in Berkeley
(510) 540-6240
3. **California.** American Cyclery in San Francisco
(415) 665-4545
4. **Washington.** Brown Dog Cycles, in Issaquah.
(425) 313-9245
5. **Wisconsin.** Williamson Bicycle Works, in Madison.
(608) 255-5292
6. **Kansas.** Old Town Cyclery, in Kansas City.
(913) 894-5588
7. **Minnesota.** Kenwood Cycle, in Minneapolis.
(612) 374-4042
8. **Maryland.** College Park Bicycles, in College Park.
(301) 864-2211
9. **North Carolina.** Cycles d'Oro, in Greensboro.
(336) 274-5959



ATLANTIS FRAME ORDER FORM

Name _____ Date ordered: _____

Address _____ State _____ Zip _____

Day Phone () _____ Fax () _____ email _____

Age _____ Height _____ Weight _____ Pubic BONE height (PBH) in bare feet _____ In cycling shoes _____

PBH measuring tips: Get a pal, a thin book, and a metal tape. Hook the end of the tape over the edge of the book cover, and pull it up until it weaves through your tissue and strikes BONE. Have pal take the reading on the floor.

Saddle height on current bike, from center of bottom bracket to top of saddle: _____ cm (inches x 2.54).

Typical tire: _____ Largest tire: _____

Saddle height measuring tips: Make sure the bike is vertical. Have Pal place the end of the tape/yardstick on the center of the crank (center of the dustcap, or if the dustcap is missing, on the center of the crank bolt). Measure to the top of the saddle, and have your eye level with the saddle when you read the measurement.

Size (circle, or we'll pick: _____): 51 53 56 58 61 64 Price: \$950. Sign here if okay. _____

Check enclosed ____ Charge Visa/MasterCard # _____ exp _____

**Rivendell Bicycle Works / Atlantis Frame Dept. • 1561-B Third Avenue, Walnut Creek, CA 94596
ph (925) 933-7304 or fax (925) 933-7305**

LETTERS

On our website we asked: What do you think and what do you hope bikes will be like in the future? And stipulated that it had to be at least 10 years ahead, and used as an example, the year 2019 (which is why so many of the following letters also predict changes for that year). I apologize for the relatively huge section this is taking up, but there were many more responses than this, and I picked out a random selection. Every so often we'll have another online survey.

IN 2010 — MORE AUTOMATION

I see, by the year 2010, some "technological" advancements. They will be reported as real breakthroughs. New things we can't do without.

For instance, I've seen the patent for Shimano's 15 speed rear derailleur system. Coupled with a double chainring only, and you've got 30 possibilities. It's just a matter of time before it's introduced into the marketplace (I'm guessing it'll happen in 4 years, maybe as soon as next year). From this will also stem a constant commercial battle of catch up/one upmanship. Bike drivetrains will get so complicated, you will *need* the STI computer or similar! and probably set to a preprogrammed set of auto shifting points. To be trick, people will be forever tweaking their bike computer for the best split second auto shifting.

Also the bike computers will be more complicated. The Global Positioning stuff will get smaller & cheaper and will be part of most people's offerings. No bike computer will be complete without GPS!

As a result, more and more people will get "fed up" with all the great leaps forward and demand to bet back to the simpler stuff (a boon for Rive), or just not get into biking at all because they never planned on plunking down 2000 dollars to get started in a beginner road rig. The road industry in particular will be hit the most. —J. Kimple

IN 2019 — GANGS

I think ... in the year 2019 ... there will be bike gangs who ride around the city, each gang will only be into a small # of years in history... say 1939-1948, their gang name would be 1939-48, other gangs would be into maybe 1950-59. They would meet in alleys late at night and battle each other with super hard history questions concerning pop culture or politics in the 40's, 50's, 60's, and 70's (the 80's are square man). They will read the super hard questions from their wireless LAN jacked into their neural net deep in their cerebellum. The 1939-48 gang would dis the 1950-59 gang by saying "50's suck" riding off on their pristine Dawes, with matching wool jerseys. Some gangs would only be in to Schwinn Varsity's, they will ride up to each other with a twinkle in their

eye... "Waterford?" "Yep, 1st one of the month," then a 2 hour discourse would happen. All discussions will be recorded and analyzed for crucial new information regarding Schwinn Varsity, saved on the 50 terabyte hard drive in one's sock.

The other "older" gangs will ride around on high rollers or super realistic reproductions of ordinarys, De Sivrac's celerifere, Drais's Laufmaschine and Starley's Coventry lever. Huge debates would come about of weather or not Michaux's velocipede had iron or wood pedals. Pubs and bars will be built with hyper specific date themes, like "June 14th 1947" or "April 11th 1872" everyone who goes to these hyper specific date theme bars will dress exactly as they did during that year, if you walk into "April 11th 1872" wearing Converse sneakers, expect to land right on your rump in front near the horse. I hope... in the year 2019... there are still neighborhood bike shops and friendly folks who love traditionalism (at least the good parts of it). I don't mind if people wear computers in their socks or have fax machines in their cars, just remember what's important, and hold on to the things that work, especially the things of yesterday that work better than the stuff of today. —Kevin Spicher

AGAIN IN 2010 — MORE IS BETTER

By the year 2010, I think that we will have internal gearing on most street (i.e., Road/Hybrid/Recumbent bikes). The Schlumpf Mountain Drive, which is an internally geared two speed crankset, will have gained in popularity and the price will have dwindled down to around \$100 (currently it is approx. \$500). Mountain bikes will continue to become motorless motorcycles. Ten speeds in the rear will be the norm, provided they can work out the reliability problems. Up front I think they will go to four (count 'em, four!) chainrings, because as everyone knows, "more is better," and new and improved is what sells. I also think that like musical standards, (e.g., Gershwin, Porter, Van Huesen and Cahn, etc.) and Harley-Davidson motorcycles, class will sell.

There will always be a market (however small/large, I don't know) for products of "substance." Example:

Harley has a real history, and sells off of that history. Japanese manufacturers try to sell off of that (styling) history, but no matter what, they are not a Harley, and connoisseurs of traditionally styled motorbikes know that, and eschew the oriental marques.

I hope that in the year 2010, bicycles still look like bicycles. I enjoy the lines of a classically styled bike. Lugs are beautiful. I also like recumbent bicycles, especially the long wheelbase models. Myra Loy, Lauren Bacall, Greta Garbo, these women have style. Even now, when they are old, they are still beautiful. They have class.

Same with Harleys. Same with twin cylinder BMWs. Same with Rivendells. I went to see the film "Bicentennial Man." It was interesting to note that musical standards were still being played in the future (as presented in the movie). Man, I hope that style comes back in style.—

Scott in Santee, CA

IN 2019 — ART SURVIVES!

I think in the year 2019 bicycles will continue to evolve toward road racing bikes for road bicycles and mountain crashing for mtn. bikes. Most bikes will be manufactured in third world countries and will be poorly made when contrasted to the industry in the 1970's and 1980's. Enough serious classicists will be around to assure the continued existence of more traditional bikes. Folks like Rivendell, Waterford and Independent Fabrication will survive but their products will be expensive (by comparison). Smaller manufacturers will make componentry available and the quality and performance will be superlative. There is no turning the clock back and we will never return to the glory days of cycling. The core enthusiasts will continue to exist and they (we) will be willing to pay what we must to get what we want. After all, excellence is never free. Some of us still fish with bamboo rods and independent makers of fine bamboo rods are out there. Their rods are aimed at the serious fly-fisher and they are not competitively priced with synthetic materials rods. Bamboo rods require more skill to cast accurately but there is profound satisfaction in having developed that skill. Hardy reels are still available. Art survives! The analogy with quality bicycles is

a valid one. Art will survive.

I hope in the **2019** my predictions for cycling will have been reasonably accurate. —Marcel P. Duhamel

IN 2025 — AESTHETIC EPIPHANY

I think that by the year **2025** overdependence on the private automobile will have all but ruined urban life in this country, and will be well on the way to doing so in the rest of the world. In the words of urban planner Richard Rogers, author of *Cities for a Small Planet* (Boulder, CO: Westview, 1998), "It is the **car** which has played the critical role in undermining the cohesive social structure of the city..."

Cities around the world are being transformed to facilitate the car even though it is cars rather than industry that are now generating the largest amount of air pollution, the very same pollution that the suburban dwellers are fleeing."

In the last fifty years the world's population has "merely" doubled, while the number of **cars** on the world's roads has increased tenfold; if present trends continue, the number of cars in the United States alone will likely double within twenty-five years. Out of an understandable fear of cycling on roads choked with auto traffic, bicyclists in the USA are already abandoning them in favor of off-road riding (I am convinced that this is the chief reason for the explosion in popularity of mountain bikes over the last decade). Within **25** years commuting and road touring by bicycle (except in ever-shrinking rural areas) will be practiced only by a few old-timers and social misfits; everyone else, oblivious to the irony, will pack his bike in the SUV and cheerfully drive fifty miles to get to ten miles' worth of single-track. The bicycle industry will adjust itself to these changes accordingly, and road bicycles will become no more than historical curiosities.

What do I **HOPE** will happen? By **2025** I would like to see the public come to its senses about the folly of its wretched addiction to the automobile, and pressure its political institutions to invest heavily in public transportation of every variety, and to curtail its manifold subsidizations of the auto, petroleum, and highway construction industries. Moreover, alternative forms of transportation, such as walking (remember what side-walks were?), and especially cycling, will become wildly popular again, enthusiastically taken up by everyone from village drunks to Wall Street fat-cats to Congresspersons and Commanders-in-Chief, creating a vast new market for bicycles and bicycle-related goods. And so long as the populace is suffering this unprecedented attack of reasonableness, it may as well also be seized with an aesthetic epiphany and recognize the ugliness of bicycle frames that are not lugged and steel.

Within such an enlightened scheme of things, the survival—even prosperity—of Rivendell Bicycle Works should be a piece of cake.

Which scenario do I believe will come to pass? Take a **guess**
— Bruce D. Smith

IN 2019 — FUNCTIONAL ART

I think... in the year 2019... not much will change. The Mt. bike will be the Mt. bike and the Road bike. ... well... what we see today and perhaps a little bigger market for recumbents. Why? Well, everything's been done and the market is driven by advertising, telling us what we want. People in the US don't really want to ride. We've been taught that exercise is pain and one should be in pain while exercising. We have more info and know less. Because, we do not trust our experiences or simply do not know how to experience. Example, a company founded on the principle of Trekking, today, sells very little in total numbers to actual tourists and if **you** look at their most recent touring bikes, you'll notice a high seat and very low bars. Basically, a road racing bike set up with a triple and and eyelets. They even went to Aheadsets, it nearly impossible to get those bars higher. I hope we as cyclists learn to stop worrying about the next deal and support local shops (and Rivendell). I hope people start to get educated and realize how fun and comfortable transporting oneself on a bicycle can be again.

I hope lugged frames make a comeback. So, our children get to purchase functional art and experience what it actually means. I hope Shimano and the big boys realize that friction shifters are better and more fun... so, instead of giving us cheap poorly work imitations of the modern index... give us back the ol' quality Dura-Ace **free** wheels and shifters at entry prices. When's the last time the auto industry actually did a major change to the automatic transmission... They don't seem to have a problem selling the idea... Mostly, I wish bicycle manufacturers and builders would spend less on girly ads and guys with mud and get out and ride their cycles out in the real world and do some serious miles, every once in a while. — Stephan Arulaid

IN 2019 — ALL ROUNDER RECUMBENT

I have ridden all types of bicycles, BMX, choppers, road and mountain bikes. I now ride a fully suspended recumbent and love it. It is estimated that recumbent sales will reach 100,000 unit sales this year and may reach 5-10% of the market in the next five to ten years.

Mountain bikes brought thinking outside of the traditional diamond frame, recumbents will infuse more ideas

and concepts that should push evolution of traditional upright bicycles.

The thought of a titanium lugged recumbent from Rivendell sounds a little strange at first, it's a thought. Maybe a Rivendell All Rounder recumbent could be in the future, complete with lugs and friction shifters.

—John Harper

2025 — MICROSOFT'S BICYCLING SUBSIDIARY

I think in the year **2025** that bicycles will be part of a modular entertainment/education/fitness center. The bicycle will be tied into a virtual reality system that will allow for total immersion in the activity of choice. So, if you choose the right program you can time trial against Miguel Indurain, sprint against Davis Phinney or try to out climb Andy Hampstein.

At your option, you can disconnect this "bicycle" and go out for a spin. It will have a built in collision avoidance system that would ensure that the bicycle and rider is rapidly moved away from any impending accident. It would have a manual and automatic shift mode and have an electric drive option. This electric drive would augment your pedaling up a steep hill. Suspension and disc brakes would be standard. The bike would be made from a polymer resin with frame stiffness dialed in by changing the elasticity of the polymer through varying the temperature of the inner tubing. The bicycle would have on-board security which would not allow any one to pedal it unless the fingerprints matched the owners on the handle bars.

The bicycle would be made by Microsoft's bicycling subsidiary-Shimano. These parts will not be on the bike of the future: chains, brake cables. Replacing them will be wireless etherports between the handle control center and the electronic microchip.

I would hope that bicycles in **2025** a knowledgeable few would recognize the period of the **1970's**- early **1990's** represented the apex of the design. People would choose friction shifting in the same way that current sports car enthusiasts insist on manual transmissions.

Steel would still be lauded for its responsiveness. Vintage mountain bike enthusiasts would prefer the light weight responsiveness of a shockless bike.

Above all I hope that the world of **2025** will be hospitable to bicycling from sport to commuting; that the urban sprawl would be abated and more people would **work** at home with car driving limited to occasional weekend excursions. The bicycle would be used for the occasional errand and as a great way to exercise and conduct a business meeting. —Mike Davis

IN 2019 — BENT VIEW

I believe in the year 2019 the majority of bicycles will be recumbents. Recumbent bikes offer extreme comfort with no butt, wrist or neck pain, even after riding for hours. The view, while riding a recumbent is incredible without bending your neck. After riding a recumbent bike, getting back on a regular bike feels like riding a picket fence.

As prices for recumbents drop, sales will overtake standard bikes which offer NO advantage over a good recumbent other than being able to jump a curb.

—Gus Morrow, Oceanside, CA

IN 2019 — CONTRACTING SUBURBS

I think by the year 2019 (probably a lot sooner than that) most bicycles will be sold on the internet. The whole existing chain - design, manufacturing, distribution, and sales, either in a department store or a bike shop - is not very marketing driven. Service and selection are spotty at best for the retail customer. I think a properly designed web site could offer better service with regard to making the bike choice, and could offer better selection than a typical department store or shop. The shops will still be around for repairs and to service the high end trade, which sometimes asks for special components or custom frames.

I hope that by the year 2019 car usage per person will be much lower than it is now, and that the suburbs will no longer be expanding and may even be contracting. I hope that this will make bicycling, walking, transit, etc. more viable as transportation modes. I think this may happen because by this time the baby boomers will be well into retirement years. Many will no longer want or need their suburban homes.

The people who will be working their former jobs will be of a much more varied age range and may not all want to live in the suburbs. Working patterns may also be very different such that people may be able to work at home much more than they do now.

—John Riley, Toronto, Ontario Canada

IN 2010 — LEATHER SADDLES BANNED

I think, in the year 2010:

- Bicycle marketers will continually introduce "new innovations", some of questionable value, to attract new customers.
- Foam filled punctureproof tires will be promoted that can only be installed and removed by bike shops with special tools.
- Steel bicycle chains will be replaced by chains made from "space age" alloys that will not

rust and will not require lubrication.

- Efforts to develop a drive shaft propulsion system are dropped due to technical difficulties.
- Following several fatal accidents due to cross winds, disc wheels are used only on track bikes.
- Push button electronic shifting and braking are available, powered by built-in rechargeable batteries.
- There is renewed interest in road bikes as former "fat tire" purchasers find that they really don't want to ride on woodland trails. Used mountain bikes can be bought for a song while affluent computer professionals "discover" traditional road bikes. Sothebys auctions off a mint condition 1970 Schwinn Paramount for \$16500.
- The last frame plants in Japan and Taiwan are closed-unable to compete with low priced third world labor. However, custom made lugged frames made by small producers in the USA and Europe are selling well.
- Some cities and states will attempt to pass legislation requiring bicycles to be licensed.
- In California, animal rights activists attempt to have leather bicycle saddles banned.

I hope in the year 2010

- Municipalities continue to include bike lanes in their street planning, and abandoned railroad track beds will be converted to bike trails.
- Parts and accessories for older road bikes and 3-speed bikes will continue to be available.
- The 14th Annual Great British Bike Weekend will be held in Philadelphia.
- Cyclists who commute to work will be given a tax deduction for helping to decrease air pollution and for reducing our dependence on imported oil.
- I'll still be riding my bikes in 2010 at age 81!

—Cal Hoadley

IN 2010 — FIVE BUCKS A GALLON

I think that gas will go to five bucks a gallon and more people will have to consider bicycles as serious transportation. I hope that gas will go to five bucks a gallon and more people will have to consider bicycles as serious transportation.

The upshot? Perhaps urban planners, city governments

and the like will get better at designing more reasonable, liveable cities where people can ride and walk and take buses more, where folks can live closer to where they work and have it be affordable, where kids will once again ride their bikes to school because it's safer to do so than it was before. —Beth Hamon

IN 2019 — NOT A CLUE

I don't think I have a clue what bikes will be like in 2019. I think I have an idea what the future will be in the next 5 or 10 years though. I am 59 and ride more now than I did 30 years ago; unfortunately for you I ride a vintage 10 or 12 speed bike. I just happen to enjoy doing the restoration myself. But it should bear well for your business because those who wanted a really nice bike 25 years ago and couldn't afford it, want that bike now and you provide it. 50 year old bones don't do well at absorbing the shock aluminum transmits. Nothing rides like good steel and the beauty of a lugged frame is appreciated by someone who remembers, and a 50 year old really knows that 2 or 3 pounds difference doesn't mean squat.

20 years from now there may not be many road bike riders unless someone like Pacific or Motiv or Specialized makes an inexpensive entry bike to kindle the desire for a road bike, Lance Armstrong notwithstanding. If they can build an inexpensive mountain bike then they are certainly capable of doing the same in a road bike. As it is now, a kid will play hell trying to get his parents to dish out \$700 or better for an entry level road bike.

—John Massa

IN 2010 — MORE CONSOLIDATION

I think in the not-too-distant future we'll see more consolidation in the bicycle industry. More bikes will be made by fewer manufacturers. Big-box discounters will nibble away at the lower end of the bike shop market, appealing to cost conscious buyers. Fewer road bikes will be sold each year. Club centuries and industrial park crits will be the last place to see bikes with drop bars being raced and ridden.

I hope that small builders continue to turn out handmade artisan quality bike frames for those folks willing to pay for them. I hope to remain well enough to ride my fixed gear bike, enjoy a tandem ride with my wife and wax my steel framesets while reminiscing about the days when men wore leather hairnets and shifted manually.

—Pete LaVerghetta

IN 2019 — STEEL WILL STILL BE REAL

"I hope" that by 2019, we will have re-discovered that human power is healthy and more than entertainment. "I hope" that by then, we will have begun to re-design our

lives so that people can afford to live within a few miles of their jobs, eliminating single occupancy vehicles and allowing the regular use of bikes and mass transit. "I hope" that by 2019, steel will still be real, that wide tires and low gears will rule, that neon paint will have faded into oblivion and that fenders will not be necessary in Seattle.

"I hope" that by 2019, bikes will SHARE the road with the few remaining cars, trucks and transit busses. "I hope" that by 2019, we will have re-discovered that we are all in this together, that no one group can any longer stand by itself or remain apart from the whole, that we will either live together or we shall surely perish.

— Robert Mills

IN 2019 — "EXOTIC" MATERIAL USED

I think in the year 2019, bicycles will have an infinitely variable transmission system, no more discrete gears, but some kind of system that will allow any drive ratio. Fewer bikes will be made of aluminum, let alone steel or titanium, and a new type of carbon fiber/ plastic frame will be popular, with few custom sizes or options, mostly mass produced in Taiwan or Singapore. Titanium or Scandium or another "exotic" material will be used for high-end bikes, which will break the \$20,000 barrier.

What I hope in the year 2019, is that someone in Italy or the US will reissue Campy Nuovo Record gruppos at an affordable price. *Suntour* gruppos will be available, as will a variation of the old Mavic gruppos.

Cyclists will tire of changing from 8 to 9 to 10 speeds, and seven speed freewheels will be popular with replacement cogs readily available.

Cycling enthusiasts will tire of dull gray titanium frames and opt for beautiful hand-made lugged and fillet brazed frames of steel, produced by craftsmen to measure. The obsession with weight will disappear, and enthusiasts will appreciate the value of hand-made, long-lasting, repairable steel frames. Commuting by car will decline, and Chinese made "Flying Pidgeon" bicycles will be frequently seen. — Gilbert Wildin

IN 2019 — MAYBE A BIT UTOPIAN

In the future I would like to see bicycles used more as a everyday mode of transportation. because for the last 40 yrs. traffic has grown faster than the highway systems. Many times highways are obsolete before the construction is completed. The highway system can not continue to grow at this rate, if for no other reason than the space planned for road development was been developed. So my point is that bicycles could provide a alternative form of transport which would allow people the flexible to travel to and from work ,and other day to day activities.

In order to fascinate this change and get American thinking about becoming more active, bicycle should become more comfortable . Ideas about materials and frame design which would allow bicycle to carry more cargo is a start. Some how this idea has to become fashionable before it would be excepted.

If bicycling would develop as a legitimate form of transportation, in this country, individual health would improve ,the planet health would improve, and community would develop in different ways. This is my idea of the big picture involving bicycle , maybe a bit Utopian, however in my opinion a sound idea. —Joseph Shryock

IN 2015 — AUTOMATIC TRANSMISSION

I think that in the year 2015, bicycles will be for the most part similar to what is offered now. There will be a relatively small number of overengineered, expensive rides built out of materials formerly hoarded for spacecraft and fighter jets, marketed to Generation-X and Y trust-funders and their offspring with visions of racing, mud, and the despoliation of the remaining natural areas. These bikes will be sold in small, boutique shops, but most of them will be sold over the Internet.

It,s very possible that an automatic transmission for these bikes, both MTB and road, will have been developed so that racer boys and girls won,t have to think about shifting and so can concentrate solely on strategy. These transmissions will likely be electronic, and will incorporate the latest chip designs. However, due to the vast number of bicycles being sold today with cable shifting, you,ll still be able to find spare. parts, but they will come from just a few manufacturers.

These manufacturers, both of parts and whole bikes, will be divisions of international conglomerates, but China will do the actual forging and assembly. The quality of the high-end bikes will be quite high, and the mainstream bikes will be high. Lugged bicycles will still be available, but their cost will reflect their rarity and the hand-work necessary to build them. There will be quite a few different designs available in the marketplace, but no more than present, since most evolution has taken place already.

LBSs will be far fewer, having been reduced by big-box retailers and manufacturers with excess capacity, the latter of which will have flooded the market in order to move product. The former will offer poorly-made knockoffs of desirable brands and models, and a large American middle class will buy them as they do now. There will be a few shops that manage to make a living selling and repairing used bikes.

Even with these evolutionary trends, I believe that the

use of bicycles will undergo a renaissance. Planners today at the local and state levels are laying the groundwork for a system of bike paths and bike lanes. and there are increasing numbers of people who are looking for more authentic experiences. as well as commuting options. In fact there is a large amount of latent demand for bicycle commuting and the facilities necessary to support this option, and with the amount of work that is being presently conducted, this will hopefully start to bear fruit in the coming years.

I hope that in the year 2015, oil prices will have begun their inevitable rise, reflecting the declining supply of new oil sources, and the ever-increasing use of oil. This will trigger increasing futures prices, which will be reflected at the pumps. Given this and the inevitable record-level traffic congestion in most cities, many people will look upon bicycles less as toys and more as a serious transportation alternative. This new demand will result in the blossoming of European-style utility bicycles, with simple drive systems, fenders, lights. alloy parts, and comfortable positions. Stephen M. Hodges

IN 2000 — EMAIL WOES

We get in trouble frequently because people send email that they think gets to us, but it never does; and we send email to correct addresses, but it gets blocked. At the core of the issue is something called, you've heard of *spam*, or electronic junk mail. I don't like talking about electronic anything, but I understand there's a group out there that blocks email if it is routed through email service providers that don't block spam. Our email service provider, ifn.net, figures your mail is your mail, and if you don't want it, you can delete it yourself. That way, he won't delete anything that just might be spam. But because he leaves it up to you. he's been blacklisted by a group who claim to be doing folks a favor by weeding out their spam. Our guys says, and I tend to agree, that you wouldn't want somebody going through your metal-or-wooden mailbox, weeding out your paper mail, would you? Especially if, in doing so, they "weeded out" letters you wanted to send and receive?

That is essentially what's happening. and we are now in the position of either sticking by ifn.net (and, one could say, taking the high road); or telling ifn.net that, "Yes, we're on your side, we agree, but our business is being hurt, so...see-ya." It's a small, local company in our same building, and the guy's name is Art. If you want to know too much about it, log onto www.ifn.net. and then click on the Stop the RPL red button. Meanwhile. if you have hotmail or at least 20 others, we can't communicate. Your mail gets through, but ours doesn't, to you. I think I'm going to cave in. What a lousy feeling!

Repack Reunion

by Charles Kelly

CHARLES KELLY WAS INSTRUMENTAL IN THE DEVELOPMENT OF THE MOUNTAIN BIKE, AND THE INFORMAL RACES DOWN REPACK, A FIRE TRAIL ON THE LOWER SLOPES OF MOUNT TAMALPAIS IN MARIN COUNTY, CALIFORNIA, WERE THE MOST INFLUENTIAL FORCE IN THE EVOLUTION OF THE EARLY MOUNTAIN BIKES. THIS IS A STORY, TRUE AND ALL, ABOUT GETTING SOME OF THE OLD FOLKS TOGETHER AGAIN. I LIKED IT. —GP

The timers were an omen. This had the makings of a great day. Just before hitting the street for Repack, I dug through the old drawer and found the two hand-held digital timers. The last time they were used had been in 1984. Surely the batteries had turned to green dust by now, more than twelve years later. I popped open the back, and the batteries looked okay. When all else fails, try the ON switch. I did, and I was rewarded by bright red L.E.D. digits. We had precision timing. But only if we wanted it. This was an informal event, a reunion. No one would want to race. The timers were like bringing your old prize ribbons, a link to the past and only for show. But they worked, and that was nice to know.

I got the word off the street a week or two before the day, and that was strange. A guy said, hey when's the Repack race?

It was news to me, but if you knew where to listen, it was all over Fairfax. Repack. Happening. But when? I followed the spoor back to Joe Breeze. He called and asked for phone numbers of guys I hadn't thought about for a long time. I asked, what's the deal?

He acted innocent, and he said, yeah, October 21, didn't you realize it? It's the twentieth anniversary of the first race. I think some guys are getting together, head on up there, about ten in the morning. Something like that.

I was at that race in October of 1976, and Joe wasn't, and I wouldn't have known that date, but Joe has made a thesis out of something we did only 24 times in our lives. No fact is too obscure. He has mined my battered notebooks that hold all the known race results, and built a database that can tell you the day anyone made his or her best run. And if I didn't have any idea what the date of the first race was, I knew Joe was close. Twenty years this October.

When I heard this, I knew I would not want to be anywhere on the planet on 21 October, 1996 at 10:00 a.m. except the top of Repack.

I kept running into old friends that morning, cruising the streets on their old bikes, and it took a while to get out of town. I got so far behind schedule that I accepted a pickup truck ride to the top of the paved road. A ride up the hill was more important when the bikes weighed twice as much and had one gear, but being behind schedule was a convenient excuse to avoid half the climbing. We parked at the top of Azalea Hill, and a few more carloads showed up. I knew some of the riders getting out, and they had some old iron to ride, so

they showed it off, one speed with a coaster brake and no front brake, a bike that will not stop on this course in less than a couple of hundred feet, which is about twice as far as you can see most of the time. Guys started orbiting slowly, watching others putting wheels on and getting bikes off racks. I didn't know what the delay was, but when I got tired of waiting for anyone to move toward the dirt road, I took off, and they all followed me. Hmmm. I hope they don't think I'm in charge of this.

Riding slowly up the last part of the approach I saw a scene from photos taken long ago. The autumn lighting was the same, low, morning sun slanting across a perfectly clear blue sky on a cool fall morning. A time capsule opened in front of me. Instead of the rainbow of bright jerseys and company logos you see at any typical mountain bike event, I saw a single orange lycra jersey adrift in a sea of blue denim. How did a guy who dresses like that even HEAR about it? Shorts? Helmets? Out of the question. Levis, boots, work shirt and baseball cap are what you wear to race Repack. If there was a jersey, the only appropriate one was Velo-Club Tamalpais, muted blue and yellow without a dozen manufacturer's logos, worn over a pair of jeans. I see that Ross Parkerson's VCT jersey is only worn for ceremonial occasions now, because it is held together by little more than hope.

About half the assembly of about 60 riders was on the latest, high tech machinery, and that was only because they no longer had their old bikes. The other half was on the largest collection of retro, original, carefully hoarded, obsolete iron that has been assembled, much less raced in about two decades. There were no in between bikes. No 1985 Stumpjumpers. Primitive, pre-1940 iron with Texas "longhorn" handlebars or new Y-frame F/S 19-pound carbon fiber \$3000 machinery. On half a dozen old bikes is the classic clunker tool kit, a pair of Vise-Grips clamped to the seatpost. This took the place of socket sets and screwdrivers for creative trail repairs, and provided its own way to attach to the bike.

Otis and Joe brought their original bikes, a pair of Schwinn's with coaster brakes, fork braces, steel rims, original paint and Uniroyal tires. Otis has a Morrow, the most desirable possible downhill unit, and Joe has the lever-shifted Bendix two-speed. Craig Weichel rode his ProCruiser, with no front brake, and Alan Bonds showed up on a perfect specimen of a circa 1976 Schwinn conversion, with a new "Excelsior" spear-point paint job, drum brakes front and rear, and perfect Brooks B-72 saddle. At the other end of the scale, Gary Fisher arrived on a Y-frame Fisher, but suitably attired in jeans, and I had my Ritchey P-21 and I wore the jeans and U.S. Army fatigue shirt that are not only what I wore then, but have worn most every day since. I would



The author on Repack.

have ridden the old iron if I still had it, but the only one I didn't ride into the ground is in the museum in Crested Butte now.

Since only 200 people ever got to race Repack, it's just something to read about, like reading about climbing Mount Everest, and its importance is questionable for anyone who was never there. It was important to me, and several major mountain bike developers still refer to it as some big deal, which keeps the image alive. Repack changed every part of my life, and it's an era that was so fleeting and so much fun that I've spent a lot of time since then trying to capture it in print.

Repack wasn't the first place anyone raced downhill. There were other guys in Marin having races as early as 1969, and it wouldn't surprise me if it happened in a lot of places. So why do all these elitist guys who got to be there claim that it was such a big deal?

First, Repack is hard enough to ride that riding it at all was originally a challenge for coaster brake riders with far less than the amount of experience anyone has now. Ten minutes on Repack was the most condensed lesson in off-road riding you could get in 1976, and you either learned fast or you took up tennis instead. A coaster brake will not stop you on a steep hill, and it will barely slow you down. You have to start the turn long before you get to it, and have the bike sideways for a while before it grudgingly changes direction. There is no comparison with a light modem bike with great brakes and suspension. A coaster brake requires a commitment to the hill, top to bottom, blind turns, whatever, because you're gonna ram anything that gets in the way. There was a good reason most people in the 70s thought we were crazy.

A coaster brake turns kinetic energy into heat, and it keeps it all in a small place. Repack will heat the hub far beyond whatever it is rated to handle. If you don't have a front brake, the coaster brake will be smoking at the bottom, and if you were dumb enough to ride with a New Departure instead of a Morrow or a Bendix or even a Musselman brake, that bogus brake would be ground to dust halfway down and you would be in free fall.

On that morning in 1976 some of us got together to settle once and for all time who was the fastest downhiller on dirt. We decided we would do it as a time trial, to give everyone the same chance, and that may have been the breakthrough that made the race so popular.

It required far more organization to pull off a race like that than just getting a few people together at the top of the hill and yelling, "GO!" We didn't have radio contact between the start and finish lines, so timing had to be done carefully. We started with a Navy chronometer and an alarm clock with sweep second hand, but within a few weeks of the first race, Fred Wolf and I had each spent \$70 to purchase a matched pair of the first digital stopwatches to hit the market. Times given in hundredths of a second give riders confidence that the results are accurately measured, and even if the confidence was only as good as the timer's handling of the clocks, there were no ties and no arguments. No one was so critical of the timing system that they wanted to do it themselves, and it fell to me to handle the timing and keep the records in a beat up notebook that now has sweat stains on a lot of the pages.

Repack created a standard that no other form of racing could do. How long will it take you to get down the hairiest hill we could find? It's one thing to talk, it's quite another to compare hard numbers posted on a bulletin

board. Suddenly there was a standard to shoot at, the best time of the day, or the course record, or a personal best. Conditions changed, so a good time on one day would be a bad time on another, but the standard to shoot at was five minutes. If you could get under that time, you joined the top ten percent, about twenty riders, and you were an Expert, and you raced against Experts. Until you broke five minutes, you raced in the Novice class. Some riders never broke out of Novice after a dozen races, but Craig Weichel did it on his first ride down Repack to win Rookie of the Year.

The field grew slowly over the first three years to about thirty riders who could be counted on to show up, and five or ten more who might. The race felt like it was as fair as anyone could expect it to be. Since the riders started in inverse order of their best times, the times would usually get faster with each new rider to arrive at the finish over a period of about an hour as riders started at two minute intervals. Years later I saw that it often took hours at supposedly organized events to sort out winners, but at Repack, with only a paper system and two timers, no radios and no computers, we gave complete results with any number of riders, in two racing categories, a couple of minutes after the last rider finished.

Far from answering anything with our first race, it turned out that we asked the eternal question, and the answer changed daily. In the first race, Alan Bonds was the only rider who got all the way down without a crash, and it was the winning strategy. It was important to go fast, but it was more important to stay on the bike. That didn't set right with guys who had figured they would win, and then wouldn't ever have to defend the title. No one had figured he was going to crash, but there's a difference between just riding the hill and racing the hill. Okay, Alan, you got lucky. Think you'll be lucky in a week? Be here.

That's how it started. Everyone wanted a shot at the title. Joe Breeze showed up from Mill Valley for the third race, along with some of the Larkspur guys who called themselves the Canyon Gang, riders who shredded their side of the mountain and had been at it longer than we had. Gary Fisher raced in the fifth event. After that the word got to the riders from the Berkeley Trailers Union or BTU across the bay, guys remarkably like us in their equipment and attitudes, and the arms race was on. The race was so hard on equipment, that just having a bike that would go the distance was an advantage where the attrition rate was over half of the riders either crashing or damaging their bikes.

Even though some of the races were won by coaster brake riders, the repairs that were necessary afterward and which gave the hill its name made it a hassle for all but the most dedicated kick-back people. Front and rear drum brakes had become the choice by 1976 because that allowed for gears on the bike and handbrakes. Amazingly, the coaster brake group included Joe Breeze, who won the most events, until he had made his own frame in 1977. Part of the impetus for building that frame was my pressure on him to make me a bike that would give me a competitive advantage my modest skills didn't. Okay, Joe said, but he got the first one, and by the time he had finished his own bike there were eight more people who wanted those bikes. Hardly anyone ever asks me, but if I had to pick the day mountain biking started, it was the day in September, 1977 that Joe rolled out his first Breezer, inspired by Repack.

Aside from creating a need for improved equipment and a place to test it, Repack did one more thing that made it important to mountain biking. It

was something that people noticed, The organized but informal underground competition was wacky and harmless, and Very California. It surfaced in "Clunker Bikes," an article in the Spring 1978 CoEvolution Quarterly that mentioned the Repack race and a place in Colorado called Crested Butte as the homes of the sport. A year later I made my first writing sale, to Bicycling, with a story about Repack, and followed with another on mountain biking in a national outdoor magazine, and suddenly I had another career. I wrote for magazines. The only thing I was expert enough to write about was mountain bikes, and since hardly anyone else knew enough to write about them I found that I could keep selling articles,

In 1979 a camera crew from a San Francisco television station talked me into putting on a race for them to film. It didn't take much reason to do a race, and that was as good as any, and we had a great turnout. The film had everything, including Matthew Seiler's bike sailing directly over the cameraman's head, long-haired rider diving down a bank to retrieve it, remounting, straightening his bars and riding off. Interviews with riders still pumping adrenaline were wide-eyed, hyperventilated and funny. The piece was broadcast locally then later on a national program, and the old footage is a priceless documentary of a Day in the Life. Mountain bikes had been noticed, and Repack was the reason.

Back to the hill, present time. I pulled out the timers, and no one seemed surprised that I had brought them or that they worked. It was as though I was expected to bring them. Each timer had a 20-year-old bottle cap taped over the reset switch to prevent accidents. Once the clocks were started (by banging together the start buttons), they could not be shut off or reset without removing the tape.

I didn't want any part of the 20th anniversary race, the first timed Repack since 1984; I didn't want to be in it or to officiate. Riders who had ridden up the course had said that there were rangers parked halfway down the hill, and I'm trying to keep my record of never being cited for a cycling infraction intact. Good thing there's a new generation that plans on living forever. Chris Ioakimedes took the clocks and the responsibility, and in traditional Repack fashion borrowed a pen to write a starting list on an envelope.

It was time for me to get out of there and beat the rush. Riding the hill that changed my life, and by extension a lot of other lives, is a spiritual experience for me. I don't go there that often, I probably ride it two or three times a year now, even though it is within five miles of my house, but you never forget the road, and I don't have any problem knowing what is around every turn. All the long-time riders have it memorized, because knowing every rock and rut, and the radius of blind turns was a cheaper advantage than technology. People worked hard to memorize it. One day I walked down from the top with a friend who took a photograph every fifty feet, converting the results to slides that we could project in sequence as a memory aid. Joe made detailed maps, with all landmarks noted, for his own study.

The number of regulars who ride here is enough that the "groove" is easily visible, six inches wide, polished of loose rocks which are everywhere else on the road, and snaking from side to side across the ruts. When bicycle suspension systems arrived on Repack, the character of the braking ripples into the switchbacks changed. The distance between ripples went from a couple of inches to a foot or so. I usually follow the "groove" on

the road, but Joe says it's wrong in a lot of places, and he is as good an authority as anyone, with the second fastest time recorded. One thing about Repack, you never have any idea how anyone else does it. All you can know is how you do it, and wonder how anyone can do it so much faster.

I guess people use the word "technical" now to mean gnarly. Even with modern brakes and suspension, you can't stop on the steepest part, a stretch of loose gravel and deep dust scattered over what feels like a cliff about fifty yards long near the top. Your best hope is to control your out-of-controlness and try to drift under maximum braking to the right part of the off-camber surface, to line up with the road when it opens up and you can let go of the brakes so your tires suddenly get traction back and you accelerate so fast you can feel the G-forces slapping you in the back. Gotta ride in the weeds on the left side of the road on the next turn, stay out of the parallel ruts in the middle. How did I ever DO this with just a coaster brake?

I only had one really bad crash on Repack. Nothing in my life ever hit me as hard as this road hit me in the chest, right here at the steepest part, on a fall day in 1979. I was so stunned I had no idea if I was all right and just couldn't feel anything, or dying. I lay there without moving for a minute or so, because I wanted to put off finding out how injured I really was. At a Repack race you didn't see anyone for most of the length of the course, because people only gathered at the bottom, and the top had no one. There was no sympathy anywhere to be found. I thought, Bob Burrowes would be getting off the starting line in about thirty more seconds, and when he came around that curve he would ride between my legs at 35 miles per hour, and he would not be happy if I spoiled his run by causing him to crash. It was not a good time and place to lie in the road. I found that I could move, and that the skateboarder's gloves, knee and elbow pads had kept me from being battered at the contact points. I was more alive than I had ever been. I heard the sound of Repack, Bob's tires ricocheting off the rocks above me, and grunts when he scared himself, and I dragged my bike to the side in time for him to rocket past with a good line.

You hated to crash and spoil someone else's run, because if you did, you were going to hear about it from the other rider. No one got a lot of shots at the Repack title and it was an effort just to get to the start. Wasting a run because of another rider's mistake was the worst thing that could happen, and you would have to look pretty badly injured before another racer would blow his run by stopping to help you.

I think these thoughts in the two seconds it takes to pass the spot. Repack is fast and slow at the same time. It's like listening to your favorite song. You know exactly what is going to happen.

Halfway down I see trucks on the road, and I slow down to touring speed. The rangers are nice enough to be where you can see them a long way off. It doesn't matter if I go by slowly, and it feels good that it doesn't. I can cruise past these guys, and as soon as I get around the turn, I'm gone.

I don't miss the old equipment. If there was one thing you remembered from a fifty pound bike with drum brakes, it was the grip it took to operate the brakes. Drum brakes fade as they heat up, and it took more and more grip on the longest motorcycle levers you could get as you went down Repack. By the time you got to the bottom you had to practically pry your fingers off the handlebars. It was painful during the ride, and for the next

half-hour your forearms would burn from the effort.

Joe Breeze has named every part of Repack. There's Yellow Face, Upper and Lower Dipper, Danger X, and so on. Here's the spot we call "Vendetti's Face," where Marc Vendetti went down in the second or third Repack, and left a good portion of his face. We knew something was wrong, because his time was too long. Anyone who wasn't down in five minutes was not having a good run. If it was over six, you knew there was trouble, but no one cared to trudge up the hill to see what it was unless it went up to an hour or so. Marc arrived at the finish stunned, blood running down his face, and Ray Flores caught it on film.

Through the switchbacks, and Camera Comer, a hard left that is featured in all the old photo collections. Over the off-camber rock that years ago Alan Bonds and I spent an afternoon attacking with a pick to see if we could create a better line on the turn. It's a hard rock, and even the road grader that scrapes the road every couple of years has given up, as we did. The hump remains, and I have the same thought I always had when I went over it: if you could cut just a little channel through the left side of the rock, you could line up on this corner perfectly and take two seconds off your time. I was talking with Joe Breeze, and we commiserated that there is no good way to get over this rock and set up for the turn. It always feels like you did it wrong, and if there's a right way you can just never find it.

When I got to the bottom, I was one of the first. The racers were waiting for casuals like me to clear the course, and Joe Breeze mentioned while we were at the top that he had stashed a couple of kegs of beer at the bottom. By the time the first racers got down the hill, there was a party going on.

The Repack finish line is a lonely rock that sticks up out of a level piece of ground, a rough, dome-shaped monument about three feet high, about three feet across, and uncomfortable as hell to sit on. It has no name, it's just the rock. I have spent a lot of time sitting on it writing race results while the sharp angles stabbed my butt, and standing on top of it addressing small gatherings of people like the one I'm looking at today.

The finish is not a straightaway, it's a blind left turn to the rock, which marks the actual line, and you can't see the rock until you are about 30 feet from it. Everyone tries a flashy sideways stop. If you didn't try to finish sideways, everyone would say, "What's wrong with HIM?" So everyone is out of control at the finish, because the turn tightens up, and the rock is a good perch, because when the sideways riders hit it, it doesn't move.

A couple of the old bikes come in with coaster brakes in the classic condition, a stinking cloud of petroleum smoke pouring off the hub, burned grease running down the spokes, and the hub shell so hot that someone always spits on it to see it boil away and hear the sizzle.

The party around the rock is like old times, so many conversations going on at once that it sounds like a schoolyard during recess, a "bike pile" growing as riders fling one-speeds on top to show how much they don't worry about fifty pounds of indestructible iron that has been stripped of anything nonessential. After some calculation by Chris on his envelope, the winners are announced, high five each other and that is that. We've used it all up, whatever it was. The beer runs out, and people start to drift off. I don't know when the next event will be, but I never knew that in 1979, either. —C.K.

MEASH

(BY DEBASHIS BHATTACHARYA)

Meash. Up!

Meash. Up!

Meash. Up!

Down through the valley,

Up through the trees,

laden with blueberries, blackberries, and cow dung,

Swimming through the light fragrant milk,

Floating in the air,

I can't recognize this valley,

The greens all look new to me,

As if I was lost in my own house.

I've been here before,

But I can't recall a thought,

Rolling. Rolling up n' then down.

The miles stroll past,

As the gentleman, that is the asphalt.

Stops and tips his tall black hat,

They say the longer you ride, the less you will feel,

But that doesn't apply in the case of these feet,

They seem to feel more,

Things come alive that were asleep before,

**The feet emerge up past the valley and
beyond the trees,**

As it looks down upon the milky past,

The feet says to the heel,

"That was very nice, we must come back."

Debashis isn't quite 20. He's a full-time student and part-time shipper here at Rivendell. "Meash"? —not sure about that.

BY MAYNARD HERSHON

ENOUGH BIKE. NO MORE.

In the '80s and '90s, while my custom bike gathered dust, I rode RB-1 Bridgestones. I had three over the years. For a while, I had two at the same time, one that Ross Shafer at Salsa converted to fixed-gear.

I never bought a complete RB-1: Always built them up from framesets, never with a harmonious "group" of parts. I used every-which-kind-a parts. The bikes worked harmoniously anyway.

To my mind, RB-1s were latter-day PX-10 Peugeot. More accurately, they were faithful incarnations of what PX-10s were SUPPOSED to be, not what PX-10s WERE. What were they?

They were Peugeot racing bikes, Reynolds 531, white with black lugs and checkered trim. They sold in the early and mid-'70s for \$325 ready-to-ride, with Simplex, Stronglight, Maillard, Mafac and Brooks.

The reality of PX-10s wasn't much. They were badly finished, casually aligned, cheaply equipped racers, but they could be made to work. Or maybe we didn't know any better. Probably the latter.

Whichever, PX-10s were the Everyman's Racing Bike of the era. They were not neo-pros, as one-down-from-the-top models were called. They were not suspect in their construction, as Lamberts were.

They were Peugeot's best bike. They looked like the bikes the Peugeot team rode in the Too-er day France. I don't imagine many actually rode genuine PX-10s in the Tour, shudder, but the fantasy was: You COULD.

We wanted them to be great bikes. We knew they were not beautiful, not lavish, and that was part of the allure. Remember, 36-horsepower VWs were selling for full retail back then. We had, at the time, a sense of suitability we've lost in the Ford Expedition age; We felt that a PX-10 might be all the racin' bike we needed. A full-Campy Masi? Overkill. Hell, it was \$650. Crazy money.

We hated conspicuous consumption and yearned for a simpler life. We wanted to be more like French peasants. A baguette, an unlabeled bottle of red, a PX-10...

French racers, unlike fussy Americans, were not obsessed with the finish on their bikes, or so we heard. Nor did they insist that every part be made to last forever, Campagnolo style. No-no. If a frame endured two seasons and parts one, your Frog bike rider was overjoyed. THEY were racers, not collectors; hardmen, not sunny weekend wusses like us. Only an American would find fault with a PX-10...

Did someone say "fault"?

Your PX-10 came with a plastic rear derailleur. It had a service life of, oh, three longish training rides. Four on flat roads. So before you replaced the first punctured inner tube on your new Peugeot, you wanted to replace the rear derailleur on your new Peugeot. C'est dommage! Peugeot made the derailleur hanger so that you could not easily replace that derailleur with another one, one that worked. You could replace it with another one just like it and enjoy three rides troublefree. Four on flat roads.

The headset was just as short-lived and nearly as difficult to upgrade.

The brakes were Mafac centerpulls. When you say they braked powerfully, you've said everything good that can be said about them. They had all the

frustrating maladjustability of cantis, but they were noisier than your neighbor kid's Yamaha dirt bike. They were the Blair Brake Project.

The cables were worse than the brakes.

All the threads and sizes were French, so your dealer had to special order any threaded parts. Even the bars and stems were French diameter. The parts were uniformly junk; Changing to better parts was hell.

Oh, and the finish: Semi-gloss housepaint applied with a broom. No clearcoat over the stickers, pea-gravel under them. Nevertheless (we were told) your Frog bike rider loved his PX-10. If it looked awful and worked worse, that was just tres jolie with him. If you think the world was not different then, imagine this: We believed that.

So, many of us bought and rode PX-10s. After a season or two of coping with all that frustrating Frenchness, we moved on, many to full-Campy Masis at that bargain \$650 figure.

We'd earnestly tried to buy just-enough bike and failed. We felt we'd been burned. We figured we'd have to buy Italian masterpiece frames and Campy or Dura-Ace parts — or we'd be burned again. Appropriateness? Noble concept. Didn't work.

Until the RB-1, that is.

Many RB-1 Bridgestone buyers felt that same sense of appropriateness. Some were spending all the money they could afford on their new bikes, but many could have bought Merlins.

The reality of RB-1s, and Bridgestone's approach to selling them, made sense to hundreds of us in the '80s. Maybe some of us were old PX-10 riders, trying again to ride something sensible: a bike, not an icon.

RB-1s were never icons, even within the Bridgestone cult. My hunch is that the cult focused less on RB-1s than on other Bridgestones, oddball bikes that couldn't have interested me less.

RB-1s were not exceptional in any way you could showcase in a catalog or point out to a new rider. No legendary Euro hands brazed and filed the joints. There was no Tour-winning tubing, no glittering chrome, no flash parts group, no muddy, Tour of Flanders-style image.

No matter. Once you'd bought a correctly sized RB-1 and adjusted the saddle and bars, you could ride away down your dealer's street and feel at-one with your bike. In the first block.

If you knew you had to ride hard on strange roads, no clue what waited for you around the next corner, you'd ride your RB-1. It'd take care of you.

If you could win the World's, you could win it on an RB-1.

An RB-1 could do anything that a full C-Record Colnago could do — at half the price and half the flash. No, it could do MORE: It could get scratched and not break your heart.

It could ride in the back of someone's hatchback, wheels off, underneath another bike; You could relax and listen to the guy's Zeppelin tapes on the way to the races.

You could be proud of your RB-1. It didn't highlight your consuming power, cultivated taste or lust for expensive lightness. It spoke quietly of your restraint and self-assurance. Enough bike. No more.



KNEELING AT THE PX10 ALTAR



by Donald Anderson

The summer I was fourteen, I needed more than grass cutting money, so I begged the local bike shop owner, Dale, to teach me how to assemble new bikes and do minor repairs. The shop sold Fuji and Schwinn, and even had a limited edition Fuji Anniversary in an enclosed case in the shop wall. As the summer wore on, I had worked on almost every Fuji model.

One busy Saturday morning, this British kid walked into the shop with what I thought was the Holy Grail of bicycles, a white Peugeot PX10. There were no Peugeot dealers within a hundred miles, so this was my first close up look at what I had read about and seen in *Bicycling Magazine*. Oblivious to the customers ahead of him, I rushed over to take a look at this purest of machines. I had to compose myself before asking if I could help him. I distinctly remember the mirror-like Stronglight crankset and the chunky, black, Nervex lugs—what a jewel.

Dale was trying to concentrate on helping a family of four while giving me the there were customers before him-eye. This college student from across the pond had to be a hardcore racer or big enthusiast. Surely I found some like-minded person whom I could bond with. Nope, he really wanted a Bob Jackson with full Campy Super Record, but couldn't afford one. Was he nuts?! He had a PX10!! How much better was a Bob Jackson? No one ever won The Tour on a Jackson. He needed a tune up by Monday and we were closed on Sunday. This bike was mine for the afternoon. Both Dale and Bob were busy assisting other customers so I stood a chance of working on the bike. Dale peaked around the corner as I was writing up the repair tag, "You can work on this one, it's just a Peugeot," he told me. Just a Peugeot! Didn't Dale know that Bernard Thevenet beat Merckx on one of these? Not another lost cycling soul. It was approaching mid afternoon when Dale threw me the key and said, "I've gotta go. Make sure you finish that up before you leave tonight. He needs it first thing Monday morning."

My dream had come true. I could take as long as I wanted, even take it for a spin to make sure everything was working proper-

ly. I couldn't wait to try it, and once I did, I was hooked. It rode better than I thought it would. A PX10 was special. From reading articles, I knew that the finish was not all that spectacular, and they were right. But somehow that just added to the attraction. I loved the checkerboard decals with the rainbow stripes, and those cool triangular 531 fork blade decals.

I went over every inch of the bike that afternoon. I had to have one. No more settling for good enough. It was time to see if I could sell my bike. I had pictures in my locker, a Pascal Simon poster on my wall. I could only imagine how much faster I would be if I had a PX10. That Fall I sold my Fuji and found a used PX10 in mint condition. And my love affair continues to this day.

Over the years, PX10s have been the brunt of many a joke or jab. With its vise-like, squealing MAFAC brakes and fake foil head badge with rivets. The poor chrome and plastic Simplex derailleurs that, if you believed the rumors, "just iblew up." I was determined to keep them and show the world that it was operator error.

In my mind there was an old Frenchman wearing a blue work coat, cigarette hanging from his lip, brazing PX10s in some corner

of the Peugeot factory (The Prestige Department). They were the work horses of the mid to high-priced market, not meant for the glass enclosed shrine. Low key in every way and arrogant in its Frenchness, the price was right. For many weekend warriors this was their right of passage. Fair weather cyclists be damned, PX10s even came with fender eyelets—in an era when Ciocc, Guerciotti and Rossin were all the rage, and glitzy pantographing ruined those satiny Italian components-BLASPHEMY!

My PX10 set me apart from the crowd. I polished it after every ride and kept it in my bedroom. I was proud to be one of the few, true followers.

I still ride, collect and restore Peugeots of all kinds. But, every time I clamp a PX10 into the work stand, it takes me back to that alter twenty years ago.



The author and his 1967 Peugeot PX10.

RANDOM WIDGETS FROM OUR CATALOGUE REVIEWED



THE BANANA BAG



W

e introduced this bag mainly because my/Grant's original French bag of the original design was stolen along with my RB-I about 9 years ago, and I wanted another. I combined my inner armchair critic with respect for the original design and managed, I think, to improve it just a little without mucking it up too much. Since then, another ex-Bstone employee who had an original sent it to me. I sent her one of these.

The shape is unique among cycling bags. From the side, it's sort of a fat comma, not a shape you expect to see on a bike. Its size is ideal for day rides in which you don't have to carry a lots of food, supplies, or be prepared for extremes in weather. A typical ride for most of us.

A typical Banana Bag load might be:

- spare tube and patch kit
- 5/6mm allens and a Y-wrench
- spare jersey or windbreaker
- bandana or fake Power Bars
- two bananas
- wallet-keys-loot-ID
- leg warmers or wooly gloves
- some other smallish thing

And you can tie on a rainshell or more wool to the loops on top.

The Banana Bag is made exclusively for us in Duluth, MN by Duluth Tent and Awning, makers of the renowned Duluth Pack, the canoist's favorite for 80 years or so. It is made entirely of heavy canvas, brown leather, and metal buckles, and has removable plastic inserts of questionable merit. The rear one tends to keep the rear panel from rounding out/opening up, but that's not a real, actual, problem. I removed it and put in a piece of cardboard, thus ridding my life of one piece of plastic. The front one isn't so important, either. Try with and without, see what works for you. The dream insert, of course, would be made leather scraps from Brooks, but let's not get weird about it.

We have two colors. The originals are olive canvas with brown leather and brass buckles. The newbies come in grey canvas, with brown leather, and the same brass buckles. They're both good. They're pricey little buggers, but the aren't *that* pricey or *that* little. There's a lot of work that goes into these; there's no way to make them this good for any less. They are remarkable bags.

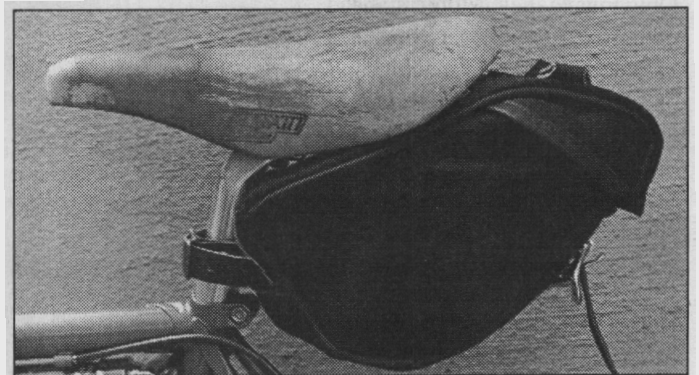
Olive-brown-brass-#20-041

Grey-brown-brass-#20-046

Price: \$75



a. One way to mount it on a B.17, using a toe-strap (buckle on the inside).



b. Here's the latest, 4-slot version using the original straps wrapped over the seat rails of a plastic saddle.



c. View of two-slot Olive and a four-slot Grey.

Now they're all four-slotters. In this picture, the pencils simulate saddle rails. You can mount them using two or four; buckle inside the bag or outside; straps routed over seat rails or through saddlebag loops. Lots of ways, they're all good, and you'll figure it out.



MORE NOTES & UPDATES



LUGGED STEM: Nitto will build it. Allen and I took tubing and lugs to them on our Japan trip, they said No Problem, so the 4-year project will soon actually happen. Nitto will build, test, and plate, all in-house. One-stop shopping at the best stem maker in the world. We're happy. Expect delivery by late June, unless something bad happens. Nitto is also working on a front high-rider rack for us. These things take years. We'll keep you posted in Readers and on the web-thing.

RIMS: The replacement for the Sun CR18 will be a Bontrager Fairlane. The rear is an off-center rim, to reduce dish. It's a smart design. The surface finish isn't up to Sun standards, but the quality and cross-section and design is terrific, and once the rims has 50 miles on it, the finish is gone, anyway, so who cares? We're getting some 36-hole 700c versions, made just for us. (It's usually 32-h only.) Not sure what rim will replace the discontinued MA2. We're looking into it. Maybe the Araya RC 540.

TIRES: We may actually get our own road tire, as early as November. If we do, it will be slightly fatter than the current 700x26. It will have tan sidewalls, black tread, will not be directional, and will be called the Rolly-Poly. We're talking with Panaracer, who is discontinuing the tires we now have, and...so that's why we need another.

CARRADICE: Has a new front pannier/rack system that mounts on the front axle, thus making it the bee's knees for suspension forks OR any fork without a braze-on mount. We'll have a sample soon. **Also**, we're asking for dark grey bags. Something may happen there.

DULUTH (BANANA BAG MAKERS): Are making us aprons, and are able to make Banana Bags in grey, with brown leather and brass hardware. We just got them in, and they're dreamy. It's hard to decide between the grey and the olive. On some bikes, the olive, on some, the grey. We generally don't offer color choices of simple items, but we are bag fanatics, and this time we broke the rule. Banana bags get lots of comments on the road. People like looking at them. They are SO nice.

SIDI: We keep our fingers crossed, but we so far seem to be able to sell enough of these shoes to keep them alive. They are wonderful cycling shoes for anything short of track or criterium racing. By the way, the only study I know of that evaluated the efficiency of a clipless system versus a toe-clip system concluded no difference in efficiency. These shoes are wildly popular, hard not to love.

BROOKS: Our latest run of B.17 brown saddles has copper rails. Some like 'em black, some like 'em copper, doesn't much matter, but since you can get the black-railed ones anywhere (well, anywhere that sells Brooks), we're drifting toward the coppers, which will be ours alone for a couple of years.

SOX: SmartWool socks are still great, but the wool content has fallen to 52 percent. We may replace them with some Wigwams NOT made for cycling that work for cycling; or we may stock both. Not sure.

WE MAY MOVE: Our rent's okay, but the space is cramped and not efficient, and our landlady is trying to find us a solution in the same building, but it's not happening. There's a bigger space downtown, still pretty cheap, but laid out better than this. It's sort of a sheet metal building with lots of car spaces in it, and we're concerned about cold in winter, heat in summer, and noise and fumes all year-round, but will investigate anyway. Peter, if you're reading this, it's that spot you and I looked at about 20 months ago, sort of across from the main Post Office.

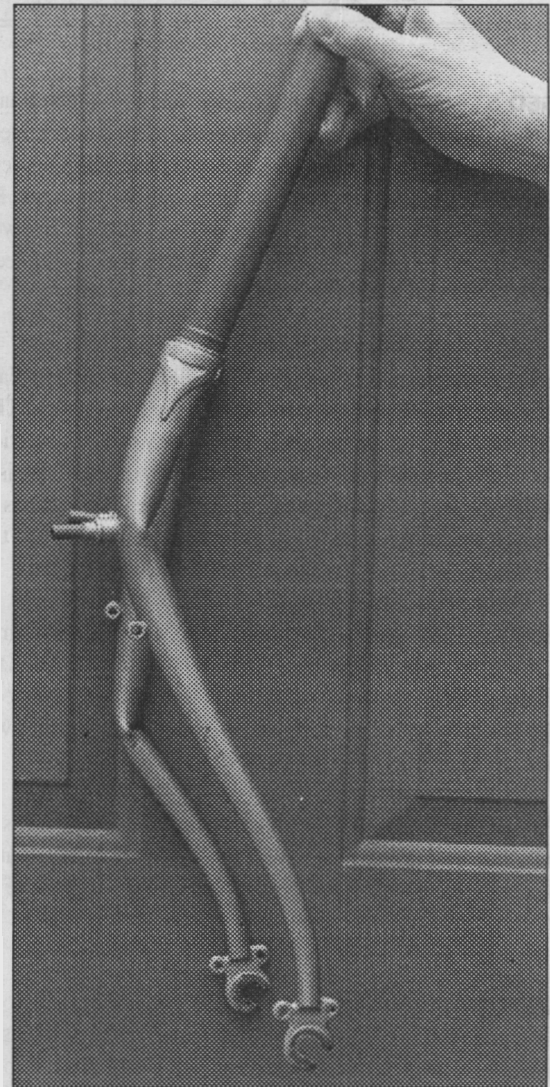
BIKE ASSEMBLY We're drifting toward in-house complete bike assemblies. It'll simplify life around here, and payments and billings and quotes—and our lawyer strongly recommends it, as well. There has never been a problem or an issue with the quality of work, but apparently it's safer for us legally to do it ourselves, and with recent hirings (Pineapple Bob is working here now, for one), assembling bikes isn't the hassle it would have been even just last year. All builds are checked by Joe, using the official Rivendell Torque wrench. We have a standard, a set way to do everything for consistency and style, and the bike is perfect. This is for Rivendells and Atlantises and Herons. It takes about 5 hours and we charge \$210—and this is now a line on our frame order form and on the invoice. Assembly usually takes one to two weeks, depending on how busy we are. If you plan to have us assemble your new bike, schedule it ahead of time, and give up heads up so we can make sure we have all the parts (and most importantly, the wheels) in stock, so there are no unnecessary delays. Schedule it a

WE'RE HIRING: We need at least two more full-time employees: One in shipping, one for order entry. As important as these positions are, neither requires a particular knowledge of bikes or our kinds of bikes. We have systems. People order by part number these days. We'll train. Jerome is hiring. Written applications only, by mail or phone. Include resume, references, salary history or requirements, and if this isn't right for you, maybe it will be for someone you know. It's best if you're local, probably. **Written applications only.** If you apply by phone, it will suggest that you are not detail oriented, or prefer to ignore instructions. So please fax: (925) 933-7305, attn: Jerome.

SPRING CATALOGUE. To printer late-April, mailed by April 29. Last year we printed 7,000. This year we're printing 50,000, and trying to distribute them at bike carnivals, centuries and shindigs, and sock-hops. If you have any connections or can help us get circulate them to cyclists, please let us know and we'll send them right off.

THE READER We have issue up to 21 mostly planned and filled, and starting this year we'll get them out on time for sure, we hope. Always trying to make it better, always open to suggestions, just be nice about it.

RIVERDANCING FORK Member-Rivendell All-Rounder rider Geoff E. of Tucson went touring-camping off road with his buddy Craig (also an All-Rounder rider) and he was just riding around until he found himself flying 20 feet in front of the bike, which had smacked into a rock. Geoff suffered from surprise, his helmet cracked badly, his fork bent back, and everything is fine now, except the helmet. It's unusual to see a fork bent this much, and it's even more unusual when, when it is bent this much, that the frame is fine. The fork is a lever, and in a front-end wreck, the lever acts upon the downtube and top tube, trying to bend them. We knew beforehand that Geoff was going to do silly things on this bike, so it was built with that in mind. The downtube was a custom-for-Rivendell Reynolds 853 31.70x 0.9 x 0.6 x 0.9; the fork, a Reynolds 531 1.2mm x 0.7mm (quite stout—a standard road blade is 0.9mm or 1.0mm). If we'd known beforehand that Geoff would do this, we'd have used a lighter fork, which would have folded even sooner. "Folded sooner" is just a non-euphemistic way of saying "protects the frame better," which is exactly what you want to happen in a front-end collision, and the surprise here is that the monster fork we did use bent so much, and yet the downtube didn't bend at all. That's part luck, but still seems a good testimony for 853 tubing. It may have happened the same with Reynolds 725, or heat treated Starlight, or any of many other good, stout, heat-treated tubes. You can't predict, but if the tubes were joined with lugs, it can be repaired (tubes replaced) and made good as new. Geoff is now back on his same frame with a new fork. The cost of the repair was \$250.



RIVERDANCING FORK

RIVENDELL DOLLARS

MAIL OR FAX ORDERS ONLY. NOT GOOD TOWARD FRAMES

FIVE

RIVENDELL DOLLARS



MINIMUM \$90 PURCHASE



Good Through June 15, 2000

Members only, no phone orders,
not combinable

FIVE

RIVENDELL DOLLARS



MINIMUM \$100 PURCHASE



Good Through June 15, 2000

Members only, not combinable,
no phone orders

SIX

RIVENDELL DOLLARS



MINIMUM \$160 PURCHASE

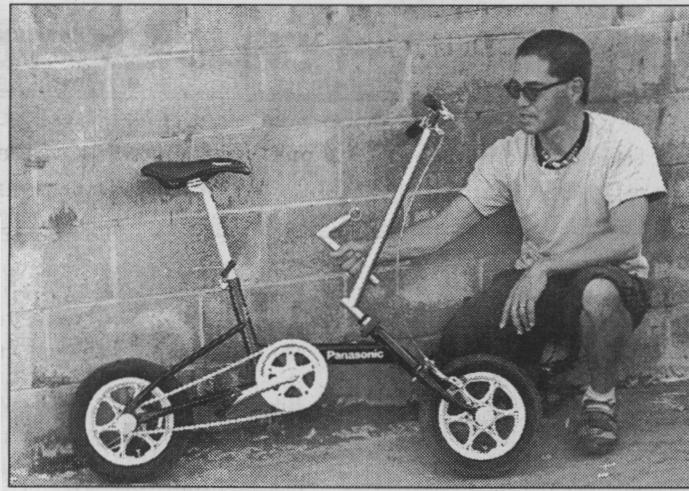


Good Through June 15, 2000

Members only, not combinable,
no phone orders

slow left turn), it feels as though the portion of the bike behind the headset (which is most of the bike, of course) just flops to the right.

The Rodeo bike is just *too* weird to learn anything practical from, but it makes you think. If more trail is helpful at height speeds, then is there a minimum speed at which this bike would actually be easy to ride (assuming you could get up to that speed without dying)? If the head tube angle were adjustable and you started with it at a rideable 68-degrees and slackened it in 1-degree increments over an hour's

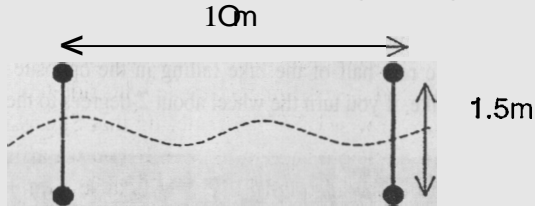


Former B'stone and Bianchi rider Robert Kurasawa, now a Rivendell guy, juxtaposes a Nitto normal stem with the whopper on the Rodeo bike (also a Nitto stem).

riding, would it ever become so hard to ride? In other words, is the huge difference a huge part of the problem? If too much trail really is the problem, then wouldn't a corresponding increase in fork rake solve it? Would the 45-degree head tube angle bike be easier to manage if the trail was a normal 2-inches or so?

In the meantime, we have it here, and any member who can ride it 20 feet on the first try wins \$100 Rivendollars. No fair if you already have one of these; unlikely, since I think we have the only one in the country.

① Speed competition through the gate

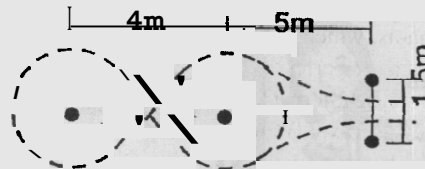


Go through 2 gates 10 meters apart without stepping on the ground.

Supreme Level	Level 5	Level 4	Level 3	Level 2	Level 1
	3.0 sec. or less	3.5 sec. or less	4.0 sec. or less	5.0 sec. or less	6.0 sec. or less

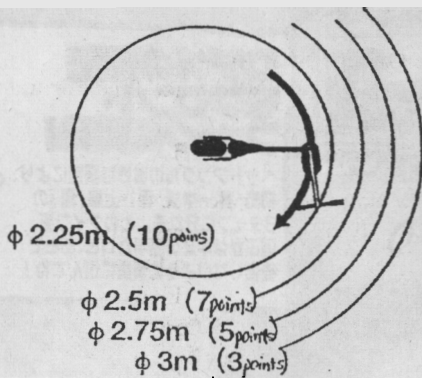
② Slalom Eight

Go as shown to mark the 8-shape track twice and back to the gate.



Level Supreme	Level 5	Level 4	Level 3	Level 2	Level 1
12.5 sec. or less	13.5 sec. or less	15.0 sec. or less	17.0 sec. or less	20.0 sec. or less	25.0 sec. or less

② Compass turn



- Draw the smallest circle. Tires going **out of** circle results in smaller scores.
- Go round 3 times in the circle of 2.25m diam. Without stepping on the ground.

Level Supreme	Level 5	Level 4	Level 3	Level 2
30 points or over	27 opints or over	24 points or over	17 points or over	11 points or over

SPRING FLYER

Some normal things at normal prices, some normal things at less-than-normal prices, some closeouts, some weird, and a few new rare things you should buy before they're gone for good.

Prices are good until our next catalogue lands, sometime mid May, and some of these quantities are limited.

Fax orders to (925) 933-7305. Phone (925) 933-7304. PLEASE use part numbers. Thanks!

Nitto Hi-Crown stem — \$45

Nitto is moving to another location, and in the process of sorting through stuff, they found a bunch of forgings that, if we liked, they could make into stems. We nodded our heads until they hurt like the dickens. It's a fine and unusual style, sort of ancient and industrial, with artistic touches lacking in modernist stems. There are 200 forgings left, in 70mm and 90mm extensions only. Quill length is 180mm, same as the Technomic Deluxe. They should go onto a nice lugged touring bikes. If you tell us you want one for your tig-welded beater bike, we won't sell it to you.

Available May 15 or so. If you order one now, it'll be shipped separately just as though we received your order then. If you pay with plastic, we won't charge your card until we ship. If you pay with check (include \$7 shipping), we'll cash it now so we don't have to keep track of it.

Nitto Hi-Crown 70cm 16-098

Nitto Hi-Crown 90mm 16-099

Banana Bag — \$75

As raved about on page 30 in this Reader. A High Class bag. **Original Olive 20-041**

Fancy New Grey 20-046

Nitto Folding Bike Tuning Stand — \$48

A clever Nitto design, it holds the rear wheel off the ground, so's you can run through the gears, and do everything short of bottom bracket and headset overhauls, which you actually could do, too, if you had a small enough chair. Perfect for working on your bike in the family room, and the alternative is in the garage, out of sight/out of mind. Great for travel. Works with rear hub spacings of 126 to 140mm, which covers everything except track bikes, old road bikes, and Santana and Meridian tandems.

Limited supply (we have 10 or so now), and if we're out by the time we get your order, we'll automatically back-order it for you, so don't order it unless you actually want it. It's super nice.

Nitto Folding Stand 20-042

Shimano XTR Front Hub, 36-hole — \$35

First generation XTR hub, with nice slender body. Very nice hub, very cheap price, with quick-release.

XTR 36-H front hub 18-047

Summer Gloves — \$15

Winter's over, it's time to start cultivating a spotty tan on the back of your hand. Cotton mesh crochet back gloves, leather palms, terry thumb patch for wiping your nose-leak. No logo, no name, nothing. We generally recommend getting a size bigger than you think you need, but it's not a big deal.

S 21-084

L 21-086

M 21-085

XL 21-087

Brooks B.17 — \$68/steel; \$128/Titanium

This saddle always seems to work, which is why most riders who buy one, buy several. It's wide enough to support your sit bones, smooth enough not to cause friction, and shaped right, to keep your penile artery, if you have one, from getting squashed. It is really, really hard to dislike. Has two saddlebag loops, so it carries any saddlebag out there. **All that, and it's the best looking saddle in the world.**

Brown w/ steel rails 11-006 Grey w/ Titanium rails 11-007

Sidi Touring Shoes — \$130

Superb all-around cycling shoes. They fit narrow and wide feet, grip pedals, offer all-day comfort even on hills, and you can walk around the Five & Dime in them, and nobody will suspect a thing. They look great (just black, with the Sidi logo). They're well made in Italy, and should last 50,000 miles. We've sold 260 pair so far—and many people who ride them have more than one pair—a wise move, considering that Sidi would like this, the only non-clickable shoe in its line. If you want fine shoes to use with normal pedals, and \$130 won't cause a family fight, get these.

Size them by this chart. It never fails.

American Size	Sidi Size	Part No.
7	39	22-052
7.5	40	22-053
8	41	22-054
8.5	42	22-055
9	43	22-056
9.5	44	22-057
10	45	22-058
10.5	46	22-059
11	47	22-060

Lug Calendar — \$16

Good through 2001, so even if you buy it now, you'll get at least 18 monthsworth of lugs. Shows 25 lugs from around the world, from crude to fine, from 1933 or so to now. The Marc Elliot photos (about 7"x9") are keepers even when the month is over. Printed on expensive paper, and spiral bound.

Lug Calendar 24-048

Grandma's Orange Soap — \$4

Made by the same people who make Pine Tar soap, but this one, even women like.

Grandma's Orange Soap 25-003

Shimano 600 Non-Aero Brake Levers — \$38

Well-made, nicely finished, attractive, they work great, and have gum hoods. At some point in the next two years we'll run out of non-aero brake levers. Plan for that!

Shimano 600 Brake levers 15-056

Kool Stop Brake Pads— \$6/pr (Road) or \$12/pr (Canti)

Unbeknownst to most people in the universe, including us until maybe a month ago, 'twas Kool Stop who made Mathauser brake shoes for all those years. Mathausers have been hard to come by, so we got some Kool Stops made with the same compound. The road shoes look cheap but work well; the cantilever shoes look fine and work well. We'll probably keep getting the cantis, and will search hi/lo for a less weird-looking road shoe. Price per wheel (two shoes).

Kool Stop Road Shoes 15-060**Kool Stop Canti Shoes 15-061****Toe Strap Buttons— \$3**

You screw them onto the end of the strap and grab at them when you snug up the straps. Grab bag colors, no choice.

Toe Strap Buttons 14-033**ALE Bottle cage— \$9**

Weights just 100g, holds the bottle securely, never marks it up and looks slender and appropriate for any nice bicycle. If you don't use a steel bottle cage, you must like a) marking up water bottles to the point where you don't want to touch them; b) making an otherwise nice-looking bike look just a little bit trashy; or c) both of the above.

ALE Bottle cage 29-001**Nitto Bottle Cage— \$30**

The prettiest and best-designed water bottle cage anybody who has ever lived has ever seen/used/fantasized about. Fillet-brazed by hand of stainless steel, and polished until it looks like a Tiffany's doo-dad. If Audrey Hepburn were still alive and rode, this is the cage she'd use. The ideal gift for any cyclist. If they don't love it, they have a major problem.

Nitto Bottle Cage 20-030**New Biggie Rivendell Water Bottles— \$3**

We got some bigger, 28oz models for summer riding. Made by Specialized, and it is the best. Well sellum cheap.

Big Rivendell Bottle 24-060**Huret Downtube Shifters, clamp-on style— \$15**

One notch below the Jubilee, but still a fine shifter. Silver, nicely finished, French, with removable clamp-on.

Huret DT shifters 17-056**Campagnolo Shifter hoods—\$6/pair**

Two score ago, it was normal for road riders to cover their Campy downtube shifters with colored rubber hoods, mostly to add color. There are just a few left, in assorted colors. They fit downtube shifters. Rare, no backorders.

Black 17-006...Grey 17-074...Blue 17-075...Green 17-076**Fake Fork Crown Paperweight— \$9**

Early cast version of our road crown. Rejected, not for building, but ideal as paperweight. Kind of a neat thing, if you like nice looking metal bike things.

Fork-crownlike Paperweight 31-012**SunTour XC Expert Brake Levers— \$28**

Simple, upper-middle grade mountain bikey brake levers made by SunTour for cross-country experts.

SunTour XC Expert Brake Lever 15-033**Short Sleeve Thin Wooly Undershirt— \$24**

The most versatile garment anybody who sleeps at night or spends any time outdoors, sedentarily or actively, can own. If this sounds like you and you don't have one, here's a chance to set things right. Good under another shirt or jersey, or fine by itself. For better or worse, it will not hide dark nipples.

S 21-117**L 21-119****M 21-118****XL 21-120****MKS Platform Pedals— a mere \$26**

If you want to pedal comfortably and efficiently while wearing cheap sneakers, these are the way to go. The ideal shoe for poor tourists, and a real eye-opener for anybody who thinks shoes have to have rigid plastic soles and click into specialized pedals. So inexpensive, everybody should have a pair. The platform distributes stress over a huge area, and your feet never hurt. *Twenty-six dollars*, for crying out loud!

MKS Platform Pedals 14-030**Nitto Crystal Fellow Seat Post— \$50**

We ran out of the old Nitto One-Bolt; this is its replacement. Slightly lighter, slightly even more mirrorlike finish. It is a minor crime that so many crummier posts sell for so much more than this one. If Audrey Hepburn were still...(you get the picture). 27.2mm x 250mm. Silver, and nobody knows why it's the Crystal Fellow, but that's what the box says, and that's what we-all call it, too.

Nitto Crystal Fellow 27.2mm seat post 11-031**SunTour Sprint Downtube Shifters— \$28**

Shifting does not get better than it is with these. Years from now, maybe about two, I will rue the day I ever went out of my way trying to sell these, because we'll be down to one pair, and won't be able to find anybody who can make them this way again. And, they'll be twice as much then.

SunTour Sprint DT shifters 17-036**Bridgestone 1994 Catalogue— \$8**

I know what you're thinking—what am I, a paper collector? I don't need no stinking 6.5-year old bike company catalogue! That's true, but this has some good information in it. It tells you how steel, titanium, and aluminum are made, from digging the hole in Earth through the entire process. There's an article about VAR, the toolmakers; a story about hand-modifying lugs, by Richard Sachs, stuffabout wool...a story about an American baseball glove maker...stuff about how tubes are butted (at least at the Reynolds factory)...and mucho mucho mas. Printed on 100 percent post-consumer waste paper

Bstone Catalogue 1994 23-010**The Dancing Chain— \$50**

Frank Berto, Ron Shephard, and Raymond Henry collaborated on this book, a thick hardcover one about the history of the

derailleur bicycle. It is encyclopedic in its scope, and has more than enough Daniel Rebour illustrations to satisfy the most rabid fan. It's an interesting book, a great gift for anybody who's obsessed with bikes, and curious about derailleurs. Lots to learn in here, and plenty to keep you entertained.

The Dancing Chain 23-013

Bondhus 4mm Red-Handled wrench — \$4

All water bottle cages should be affixed to the frame with 4mm bolts, because the only way to do screw them on without driving yourself nuts is by using a Bondhus wrench, aka a ball-head allen; and 3mm Bondhuses are virtually unheard of, and you can't find standard bolts that fit the threads and also take a 5mm one. What's more, it is so unpleasant to do that task with a standard L-allen, that even if you use this just once, it's worth the price.

Bondhus 4mm 19-011

Campagnolo 5mm allen — \$5

It's probably the most expensive allen key in the world, given that you can get allens for \$0.65 at the local megadiscount hardware store, where they get them in a container at a time. Even a Snap-On will cost you less. But this one is silvery, and has the raised, knurled section in the middle, so you'll never mistake it for a 4mm or 6mm when it's past your bed-time and you're still up working on your bike.

Campy 5mm allen 19-017

Phil Hand Cleaner — \$6

The best hand cleaner out there. The most pleasant to use, the fastest to clean, the easiest to rinse off. It's brown, made from some kind of tree pulp (I think I got that right), and it's gritty in a manly sort of way. Throw out that can of orangy stuff. This is way better.

Phil hand cleaner 31-038

SHIMS! 25.4 to 26mm — \$6

You can go to the local hardware store and buy nonmetric shim stock (I think it's .010" you'll need), but then you end up with quadrillion times more than you'll ever use, and what have you really saved? You can snip up a Coke can, but that usually leaves a sharp edge, and it never works all that well, because you need so many layers, and they all slip and slide as you put the bar on. Forget it. Nitto makes these, and they are the cheapest thing you can buy from Nitto. Heat treated steel, bead blasted for grip (never thought of that? Nitto did. That's why they're neat-o), and sized perfectly. Allows you to fit a Priest bar to a Technomic Deluxe or Pearl stem.

Nitto's Neato Shims 16-095

CHEAP GOOD CHAINRING — \$8

This one's a 130mm bcd x 47t. Aluminum, silver, made by SR in Japan. Perfect for a single speed or practical, non-racing double.

Cheap Chainring 12-061

Light 26-inch rims (by SUN) — \$10

The nearly forgotten DW6000 was made as a light trail rim, which means it really is good for light trail use and ANY road

use. 32H only, silver, eyeleted, around 400g. Priced way too cheap, but not to worry, we're still making a profit on them. Not enough to pay any bills, but the point is to free up that rim hook in Room 2, to make room for some new ones.

Light Sun Rims 18-060

No. 61 Pedal wrench — \$14

Slays recalcitrant pedals in a single thrust. Longer than any other pedal wrench we've seen. Harder (longer wearing jaws) than any we've felt. Silvery, with deep stamped name on it (+Eldi + No. 61. The best pedal wrench in the world, it'll last several generations. Tip: Put pedals ON while holding the middle of the wrench. Take them OFF using the end.

No. 61 19-051

Increasingly Rare Sachs Touring Freewheel — \$52

Sachs no longer makes a 13x32 7speed, and I don't think anybody else does, either. So, if you want those nice touring gears, step up to the plate and snag this one before they're all gone. Yes, \$50 is a lot, but does it help to know that we buy them for \$39? They'll be more when the catalogue comes out, honest.

Sachs 13x32 7-speed 13-017

Cheap-but-Decent Shimano freewheel — \$20

It's a 14x32 6-speed. It's \$20. It doesn't matter what the intermediary gears are, since if you're after a 6-speed fw with a 32t low, this is about it.

Shimano 6sp 14x32 14-036

Campy Record or Croce D'Aune pedals — \$100

Somehow I/Grant ended up with about 5 pairs of these. Some have silver cages, some have taupe cages. They're Campy's last hurrah in pedals before they went clipless, and as pedals go, they're probably as well-designed/made/finished as pedals can get. Virgin, no box. Nobody has these pedals. I've never seen them on any bike. They look great, and they must be good, because they're Campy's last "Let's make the best pedals ever" pedals.

Campy Pedals 99-999

Priest Handlebars — \$20

Our most popular bar for city riding and casual short rides. It's aluminum, with a short 65mm rise and a gentle sweep-back, and it's wider (510mm) than most such bars, so you have better control over the bike.

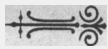
Priest Handlebars 16-056

Dream Bars, now in 46mm width! — \$50

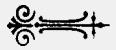
Once you go wide, it's hard to go back. I'm not saying everybody likes wide bars, but 9 riders in 10 who try wide bars love them and won't give them up. Until we got these, the widest road bars we had were the 44s. If you wanted wider than that, you got the DirtDrop wides—a great bar for road bikes, tandems, and touring bikes, but some guys want a flareless bar for a more classical look. So, we got these in 46. If you've been riding 44s and want to try something a wee bit wider, here they are. Heat-treated. A wonderful road bend with a flattish area behind the brake lever hoods.

Dream Bar 46 16-097

(44: 16-082; 42: 16-081; 40: 16-080) <— \$40



RIVENDELL FRAME ORDER FORM 2000



Date submitted: ___ / ___ / ___

Name _____

Address _____ City _____ State _____ Zip _____

Day Phone () _____ Fax () _____ email _____

Age _____ Height _____ Weight _____ Pubic BONE height (PBH) in bare feet _____ In cycling shoes _____

PBH measuring tips: Get a pal, a thin book, and a metal tape. Hook the end of the tape over the edge of the book, and pull it up until it weaves through your tissue and strikes BONE. Have pal take the reading on the floor.

Saddle height on current bike, from center of bottom bracket to top of saddle: _____ cm (inches x 2.54).

Saddle height measuring tips: Make sure the bike is vertical. Have Pal place the end of the tape/yardstick on the center of the crank (center of the dustcap, or if the dustcap is missing, on the center of the crank bolt). Measure to the top of the saddle, and have your eye level with the saddle when you read the measurement.

Years riding as an adult _____ Current favorite bike (model, size, comments) _____

Type of riding you will do on this bike: _____ Approx. yearly miles: _____

Typical tire: _____ Largest tire: _____ Percent time riding on that thar largest tire: _____

What style handlebars will you ride? Drops _____ Moustache _____ Both? _____ Other? _____

WHY DO YOU WANT A RIVENDELL? _____

Model(circle) **Road Std LongLow All-Rounder** Size (c-t): Rivendell's choice _____ No. Please build a _____

COLORS (NO NEED TO DECIDE RIGHT NOW, BUT....)

Light Metallic Blue, Silver, Solid Red, Pea Green, '50s Coleman Green.

Surprise me with a color either on or off your list, but stay away from (list your fears):

(All frames have cream head tube panels and lug widows. When we get a deposit, we'll send you color chips, and then you have a month to decide.)

DELIVERY: 1 0 TO 1 3 MONTHS.

PRICES, DEPOSIT, FINAL PAYMENT

Road-style Custom \$1750 (sidepull brakes, standard road braze-ons)

All-Rounder/Cantilever-style Costom \$1 800 (canti brakes, standard touring braze-ons)

..... \$300 deposit required, see details below.

Price includes anti-rusting inside the tubes, two water bottles, all the bolts, and a Rivendell cap and T-shirt.

Final payment is due before your bike gets paint.

Assembly and Installations

Complete build: \$210. Standard build, no rack sor fenders. Requires minimal re-assembly when you take it out of the box

Headset: We install Tange-Sekei headsets free with purchase (\$50). If you supply your own, \$40 labor. No Kings (we haven't the tool for it.)

Bottom bracket: Installation free with purchase (**\$135**). Want it? _____

Specify crank model and chainrings, or Phil bb spindle length: _____

DEPOSIT: \$300

Check or credit card. The deposit gets you a place in line. If ou cancel after 60 days, this deposit is refunded as Rivendell credit.

Freight: UPS Ground is \$35 per frame, \$50 per complete bike. International, \$200. For faster methods, call.

Payment Enclosed: Visa or MasterCard: _____ expires ___ / ___ / ___

Your Signature: _____

Other comments?
Photocopy this and write
on the back, or submit a
separate page.

Rivendell Bicycle Works / Frame Dept.
1561-B Third Avenue, Walnut Creek, CA 94596
ph (925) 933-7304 or fax (925) 933-7305





RIVENDELL BICYCLE WORKS

NEW 2000 FORM



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MAILABLE, FAXABLE, COPYABLE PARTS & ACCESSORIES ORDER FORM

NAME _____ ORDER DATE _____

MAILING ADDRESS _____ CITY _____ STATE _____ ZIP _____

SHIP TO, IF DIFFERENT _____

WORK PHONE: () _____ HOME PHONE () _____ FAX OR EMAIL? _____

ITEM NO.	QTY	SIZE	ITEM DETAIL	PRICE EACH	TOTAL

BACK ISSUES/RR, \$2 EA: 2, 3, 4, 7, 8, 9, 11,12,13, 14, 15, 16,17 (CIRCLE CHOICE WHOLE SET IS \$25)

IF SOMETHING IS OUT OF STOCK

Ship back-ordered items as they become available (+\$2 shipping/handling).

No backorders.

Backordered items are charged \$2 freight (U.S.), but we toss in surprise(s) worth at least a couple bucks, and sometimes much more.

First Subtotal: _____

Minus any Rivendollars or Gift Cert: _____

Minus \$10 membhub. renewal: _____

Second, possibly lower subtotal: _____

Tax (CA only): _____

Shipping (see below left): _____

Membership subscription renewal

1 year \$15, 2 yrs. \$25, 3 yrs. \$35

TOTAL _____

SHIPPING		
Parts & Accessories rates below. Wheels \$12 in USA.		
Standard (usually U.S. Priority mail)		\$7
2-Day Air	\$20	Most orders shipped within 24 hours.
Next Day (saver)	\$30	
	Ground	Air
CANADA	\$15	\$22
INT'L	\$25	\$45

PAYMENT

Check or money order number: _____ Amount: _____

Credit Card Number: _____

EXPIRES (numerical month/year) _____ / _____

RIVENDELL BICYCLE WORKS

1561 - B THIRD AVENUE

WALNUT CREEK, CA 94596



FIRST CLASS!

Presorted

First-Class Mail
U.S. POSTAGE

PAID

Walnut Creek, CA

Permit #816