



When the Streets of Rome Were Filled With Rubble

The editorial I'd originally written for this section got squeezed out, and that's just that. Awkwardly, then, I've got to squeeze in this update about Rivendell frames, the builders, the costs.

For a few years now, Rivendells have been custom frames. Our prices have increased, and irrefutable evidence screams that we have to price them sustainably. Although we all like once-in-a-lifetime aren't I lucky don't *cha wish* you'd bought *when I bought?* bargains, the fact is that we want to keep doing this. Our long-term health plan won't allow it, unless we charge more.

When you get a Rivendell, you get a frame that you will keep and ride into the sunset; and you contribute to the continuation of this dying craft, and you help keep good people employed. We're Joe Starck's and Curt Goodrich's sole means of support. We're 40 percent of JB's paint business. And then there's us.

We have three prices, reflecting three paint styles. The quality of the frame and the paint is the same. It's purely a style difference, and that's why there's a price difference.

Plain

Styling: The lug windows get cream fill, but not the head tube.

cost: \$2,200

And you get: Installed headset (\$50+ value), and a \$100 gift certificate for parts or accessories.

A few riders like the lugs, but want more of a stealth Rivendell, and this satisfies that. The windows in the lugs still get the cream filling, because JB refuses to leave them unfilled, and that's okay.

Standard

Styling: The lug windows get cream fill, and the head tube is painted the same cream.

Cost: \$2,250

And you get: Installed headset (\$50+ value), and a \$100 gift certificate for parts or accessories.

This has been our standard paint for years now. It looks terrific, shows off the lugs, and isn't too showy..

Fancy

Styling: Like the standard, plus the chainstay and seat stay bridges get painted cream, and the fork crown gets cream detailing on top.

cost: \$2,300

And you get: Installed headset (\$50+ value), and a \$100 gift certificate for parts or accessories.

The cream bridges don't show from the sides, so it's not world's different from the standard, and it is definitely the fanciest we'll ever get with paint. Rivendells are practical bikes first, designed to be ridden and used, and we'd rather you not get the fancy if it means you're going to be shy about riding it in the rain, or whatever.

By late January we'll a frame brochure. Until then, Joe's been doing a good job on our website, and you'll be able to see the styles and new colors there.

Your Rivendell is custom. I design it for you and the riding you'll do. We send the specifications and materials to the builders. Seven to twelve months and \$2200 to \$2300 later, you get a beautiful, hand-built, meticulously detailed frame that you can ride for the rest of your life. It's a good, slow, meticulous process, but it's the best way to make such a fine bicycle frame. If you want more information on Rivendells, or if you'd like to order one, please contact us. Thanks, and sorry if this editorial seems too commercial. The space was available, though.

— Grant

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RR 21 Website Questionnaire

PLEASE FAX OR MAIL IT IN.

Fax toll-free: 1 (877) 269-5847 That's 1-UPS-COW-LUGS

Mail: RBW /Questionnaire, Box 5289 • Walnut Creek, CA 94596

1. Compare the look of the old site (8 months ago and earlier) with the new one. The new site is... Circle:

1) Much Better, 2) Slightly Better, 3) Same, 4) Slightly worse, 5) Much worse

And why:

2. Most web browsers have the ability to make text larger or smaller, and we've used the small text on the home page to reduce the amount of scrolling necessary. Is it too small, or is it easy enough to read?

_____ it's okay, easy enough to read _____ too small. Make it bigger, please

3. Have you ordered at all from our online Odds and Ends page,

<http://www.rivendellbicycles.com/general/septflyer.htm>? _____ Yes _____ No

4. If you've seen our Online Bike Gallery, <http://www.rivendellbicycles.com/gallery/>...

a. Did you find it useful? 1) Yes 2) No 3) Haven't seen it yet.

b. Comments, requests:

5. Would you prefer narrower pages or wider pages? Narrower pages work well for laptops, wider work well for desktops. _____ Narrower, _____ Wider, _____ Fine as they are

6. Articles and informational stuff:

a. What have you most enjoyed? (List specific articles) _____

b. What topics would you like to see up there? _____

7. Anything else you'd like to see added to or changed about the site?

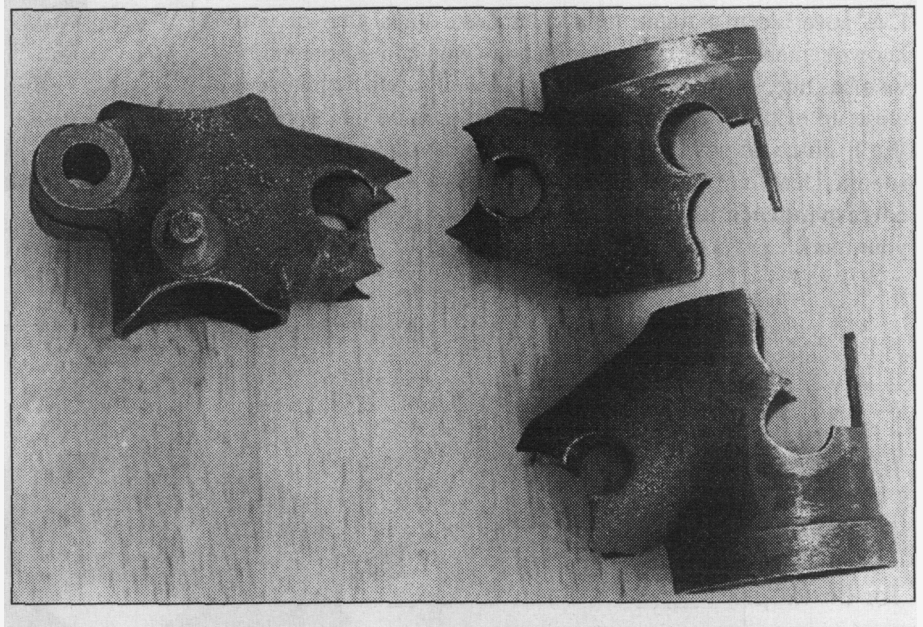
Some English Lugs from the '30s

These are the **July lugs** in our lug calendar, which by the way we're out of, and can't afford to reprint again. We'll try to do it next year. These lugs were made in the '30s by a process called sand-casting, which is explained well and illustrated excellently in the 1994 Bridgestone catalogue (#32-010, \$7), but is basically pouring molten iron into a mold made of compacted sand, rice hulls, and coal from the ocean floor. Then you let it cool. You can see the graininess in the surface of the lugs. Such tex-

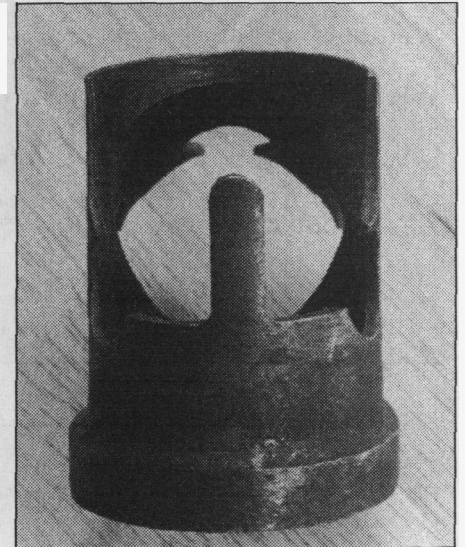
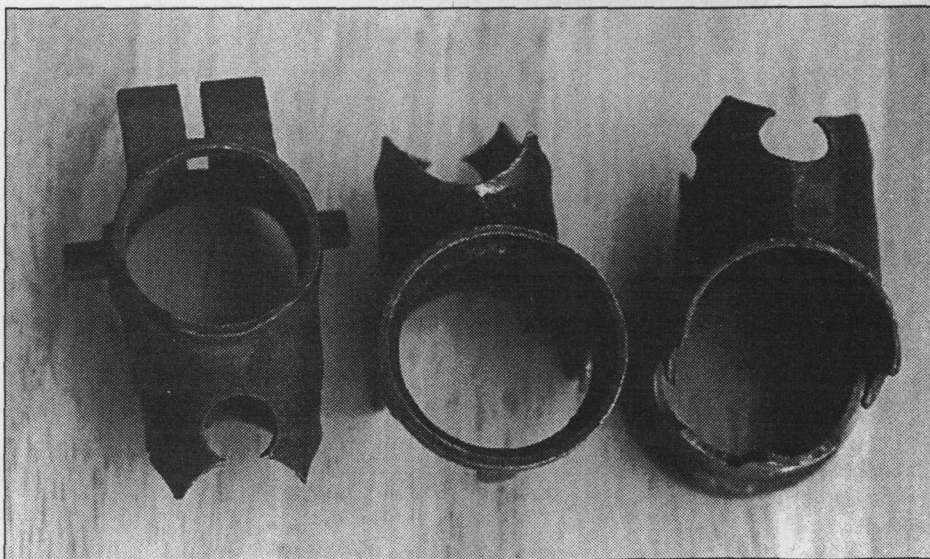
ture would be unacceptable in a modern investment cast lug, but in the days when these lugs were made, ships still navigated by sextant and dead reckoning. Suffice to say that for the early '30s, these were state of the art, and in fact are still better lugs from most ways of judging lugs, than most of the lugs used on pro bikes through the mid '70s.

As to who made them, I'm inclined to think it was the British firm, **B.S.A.** In the calendar we speculated about them being

The seat binder was cast into the seat lug, a smart detail that was ahead of its time. The positive studs help to locate the seat stays, and mechanically strengthen the connection. Notice the reinforcing rims at the bottom of the lower head lug and the top of the upper one. These are cast iron, which is relatively soft, so these reinforcements were probably necessary. We do the same in our current Papillio Robustus and Atlantis lugs, even though modern casting steels don't mush out as easily.



Top views of the lugs. The seat stay-locating studs are fairly visible on the seat lug there on the left.



Unusual shoreline on the lower head lug. The road rage special?

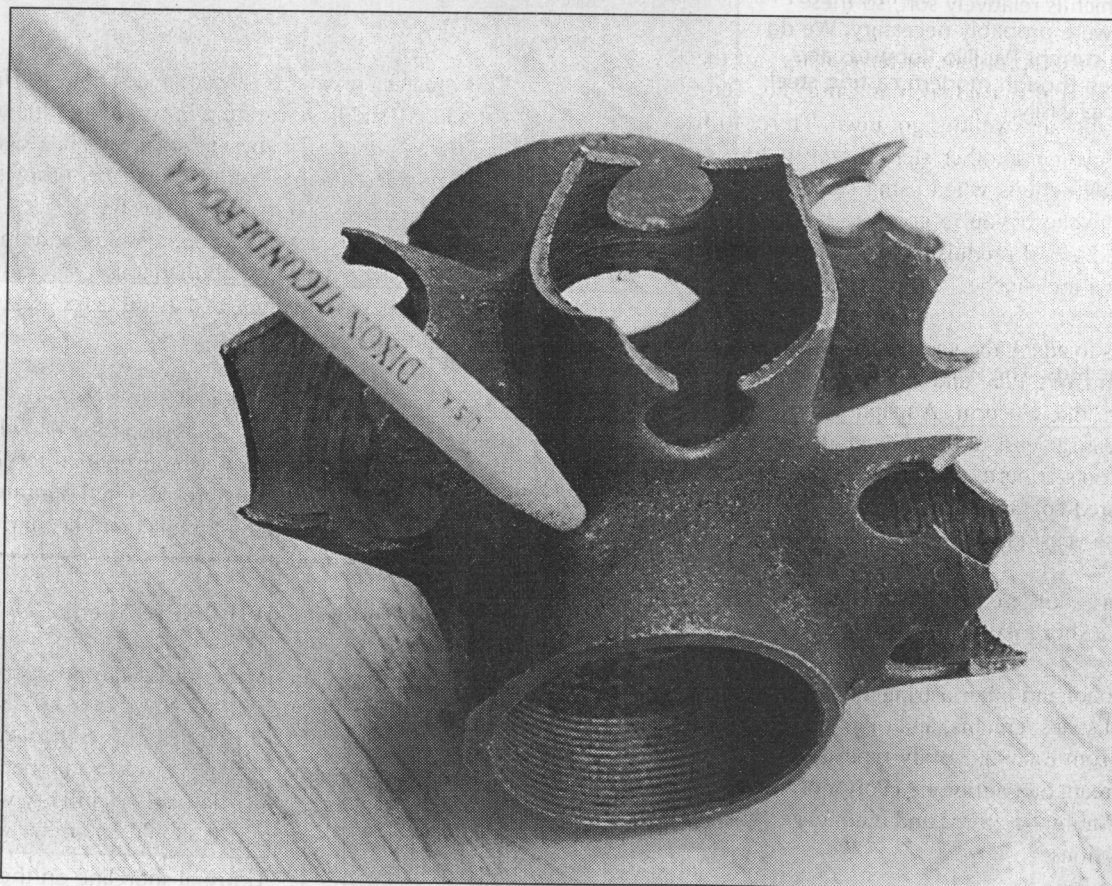
made by another British company, Chater-Lea; or Ekla, from Belgium. I was wishing they were Belgian, but I've done quite a little reading since, and I'm leaning toward B.S.A. now. B.S.A. stands for British Small Arms, because it sounds more gentle than British Small Guns, but that's what arms means in this case. Why not name the company British Bicycle Lugs, and stamp B.B.L. on the guns? Maybe they made more guns than lugs.

They look English, don't they? Fanciness is associated with English lugs, and these may have been the ones that got them headed that direction. It would be neat to have some fresh, precise castings made in this pattern, but I have a feeling that these were filed and reshaped often, before building with them.

I've never seen a frame built with these lugs. One of you knows somebody who knows somebody who knows somebody who has one, and if you can snag a photo of it (whole bike and close up of the lugs), we'll put it in here and on our website. We'll give you a \$1,000 gift certificate if you're the first to submit. Deadline, January 20, 2001. **We won't respond to any correspondence about it**, just send photographic proof. On your mark...get set...go.



Here's the underside of the bottom bracket shell, showing evidence that it was made in Britishland.



The bottom bracket shell has an oil hole in it, for easy lubrication. Shown here with a pencil, just in case the picture didn't come out good.

Crotchitis and Crotch-Rub

BY BERNIE BURTON, M.D.

CROCHITIS REFERS TO PROBLEMS IN THE GROIN, RANGING FROM DIAPER DERMATITIS, CICATRICIAL FOLLICULITIS, IRRITANT DERMATITIS, ALLERGIC CONTACT DERMATITIS, ATOPIC DERMATITIS (CHILDHOOD ECZEMA), AND FUNGAL INFECTIONS.

ARE YOU STILL WITH ME? GOOD.

THEN YOU'LL WANT TO KNOW THAT IT MAY BE MADE WORSE BY HERPES SIMPLEX.

DIAPER DERMATITIS

Caused by diapers, shows up as a red, tender, itchy, eczematous rash between the vagina and anus. It is always infected with yeast (monilia), and almost always responds to efforts to dry it out and kill the yeast, which is the main cause. Cool Max riding shorts with no chamois and/or a perforated chamois will increase airflow and help dry it out. Large amounts of Monistat derm will kill the yeast, as will anti-yeast medications such as Diflucan, Sporonoz, or Nizoral.

If you're suffering on a ride, somehow get to a place where you can apply cold compresses and ice packs. You'll find there's nothing like crotch problems to stimulate your resourcefulness.

If you can anticipate a problem, or have history of them, carry a high strength topical steroid such as Ultravate, Temovate, or Diprolene to make the swelling go down. Thirty to forty milligrams of prednisone, another steroid, will help, too. Follow your doctor's instructions when using steroids, of course, and forget the prednisone if you're going to be drug-tested for an event. Continued use of prednisone will deepen your voice and make you grow a moustache.

The key thing is to attack the yeast early. Wash the groin, vulva and vagina with Dove Pure and Natural, and apply pure, simple moisturizers like Eucerin, Aquaphor, Nivea or Moisturel. You want to create a yeast-unfriendly environment, and you can do that with Monistat derm and/or Acidopholus capsules, buttermilk or cultured yogurt. For heavier artillery, take oral antibiotics to decrease yeast growth. Don't douche.

There are many skin treatments you should avoid like the plague. Here's a short list:

- Rubbing alcohol and other astringents
- Antibacterial soaps, creams, and ointments
- Everything from Bath and Body-type stores.
- Neosporin cream and antibiotic (Polysporin is much better)
- Household Antibiotic cream and ointment
- Solarcaine lotions
- Topical Benadryl

GOT HERPES?

Although herpes simplex frequently shows up in discussions of crotchitis, it is amazing that it does not show up in discussions of saddle sores in men. In any case, the mental stress of a ultra-endurance ride along with the skin irritation can make it worse. Treat it with Valtrex(500mgaday)or Famvir (250mgaday).

NEW PROBLEMS FOR WOMEN ONLY

Although it has never been mentioned in the cycling literature before, several female cyclists have complained of a new problem. Although the majority of your weight should be on the sit bones, the pelvic rotation necessary for aerodynamic (aerobar) form brings a bit more saddle pressure forward into the perineal area.

This greater pressure is placed on a smaller surface area in cut-out and gel saddles, resulting in two tender linear hot spots that can be agonizing for the endurance female cyclist. One long distance rider I've spoken to found this problem to be almost totally disabling. To avoid this problem, get a Brooks saddle that will properly support your sit bones, and tip the nose of the saddle 3-5 degrees below horizontal. This will result in more pressure where it belongs, and avoid extra pressure and friction on the upper inner thighs.

I have discussed this problem with only a few of the best female cyclists in the country. To further our knowledge in understanding of this problem, I would be glad to discuss this with anyone suffering from this problem in the future. Then we can update this article in the future as more becomes known.

How To Find Out If You're Allergic To Something

Write down the names of all the products you think you might be allergic to. Number them. Make a similar number of small circles in a vertical row on your upper inner arm. Apply product number 1 to circle number 1 three times daily. Do similarly with the rest. Within 3 to 4 days you should break out with itching, redness, swelling and possibly blisters at the site of the allergic substance.

Atlantis Review & Update

The first production of 100 Atlantises sold out sooner than we expected, and the second production of 50, due early January, is about one third sold out. The third production is scheduled for delivery in early March, and if all goes well with the prototypes, it should include some 47s and 68s.

Some of what follows is old news to a few of you, but others of you are reading the Reader for the first time, and so it bears repeating. Besides which, if we don't tell you about Atlantises, who will?

What it is. Who makes it. Why it's good.

The Atlantis is a wonderfully designed, beautifully hand-built lugged steel frame for touring, commuting, trail riding, general road riding—just about anything short of competitive road **racing**. The design is based on, and in fact benefitted from, the Rivendell All-Rounder.

The Atlantis is a hand-built production bike, made in small batches of 5 to 10. It is made exactly to our specifications in Osaka, Japan, by a small custom frame shop called Toyo. Toyo's chief builder and designer, Tetsu Ishigaki, is 33 years old. His father started Toyo more than 30 years ago, and still active, designing and building wheelchairs and other basic necessities for old people who can't get around so well anymore. Although Tetsu is just 33, he has been brazing and building frames for 21 years. The house he grew up in shared a wall with the famed Japanese custom builder Nagasawa, who to this day still builds perhaps the most sought after professional track frames in Japan. Tetsu (whose name translates to steel!) learned brazing from Nagasawa when he was 12.

There are 10 builders at Toyo, with an average of 15 years of experience. Toyo's frames are among the most prized in Japan. Most of the Ritchey frames made in the past 5 years have been built by Toyo, as they still are today. Tom Ritchey is about as demanding and meticulous as any frame builder, and he has raved to me about Toyo's quality.

The 100 frames we've received bear that out. The brazing is neat, the transitions from tube to dropout are beautiful and consistent, and in any way that a frame can be judged, they are first class, and at \$950 for a painted frame and fork, with a real metal headbadge and a headset already installed, the Atlantis is an out-and-out bargain. Functionally, it is 100 percent as good as a Rivendell All-Rounder. Aesthetically, it is 95 percent there. (Joe Bell paints Rivendells, and he's the best in the world. The Atlantises are painted by the best painter in Japan, Uemura, but he doesn't spend 8 1/2 hours per frame, as JB

does.) And, at roughly 40 percent of the cost of an All-Rounder, the Atlantis is a steal. If you're looking for a beautifully crafted, great-riding bike with maximum versatility for loaded or unloaded riding on pavement or trails, the Atlantis is as good as it gets until you go to an All-Rounder. If the roughly \$1,200 difference between the Atlantis and the All-Rounder is swallowable, and you can wait longer, then you might as well do it, because there's no upgrading from one of those. But if you're still a student, or a parent putting kids through school, and a \$2,200 frame purchase will cause friction or stress at home, then rejoice for the Atlantis.

The forks are beautifully curved. They're bent before the dropouts are brazed in, to assure that the bend continues over their full length. The chainstays have a subtle curve that provides great, balanced clearance for 24/26t small chainrings, allowing good chainline and generally shorter bb spindles than most crank makers recommend.

The Atlantis comes in set, unchangeable, un-customizable geometries, which you can review on our website. Generally, you'll see low bottom brackets, longer than normal chainstays, moderate head tube angles, and an overall design that allows you to get the handlebars high up into a comfortable zone. The color is Testors model color 2135—a creamy blueish green that some liken to Bianchi's celeste, but we see a difference, and that wasn't the goal. The head tube panel and window cutouts are painted creamy. The overall look is soothing, gentle, beautiful...and ready for action.

The 51, 53, and 56cm models take 26-inch wheels, up to 2.2-inches in width. The 58, 61, and 64cm models take 700c wheels up to about 2-inches wide.

Atlantis Standover Heights

(at the middle of the top tube)

Minimum = with 26 x 1.25 or 700x35.

Maximum = with 26 x 1.9/2" or 700x45.

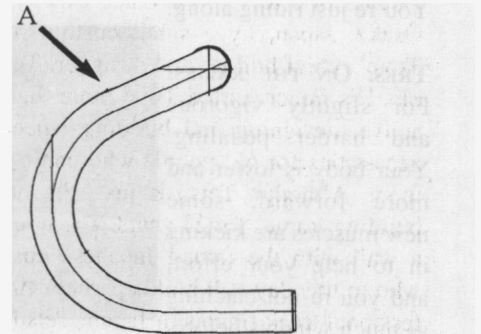
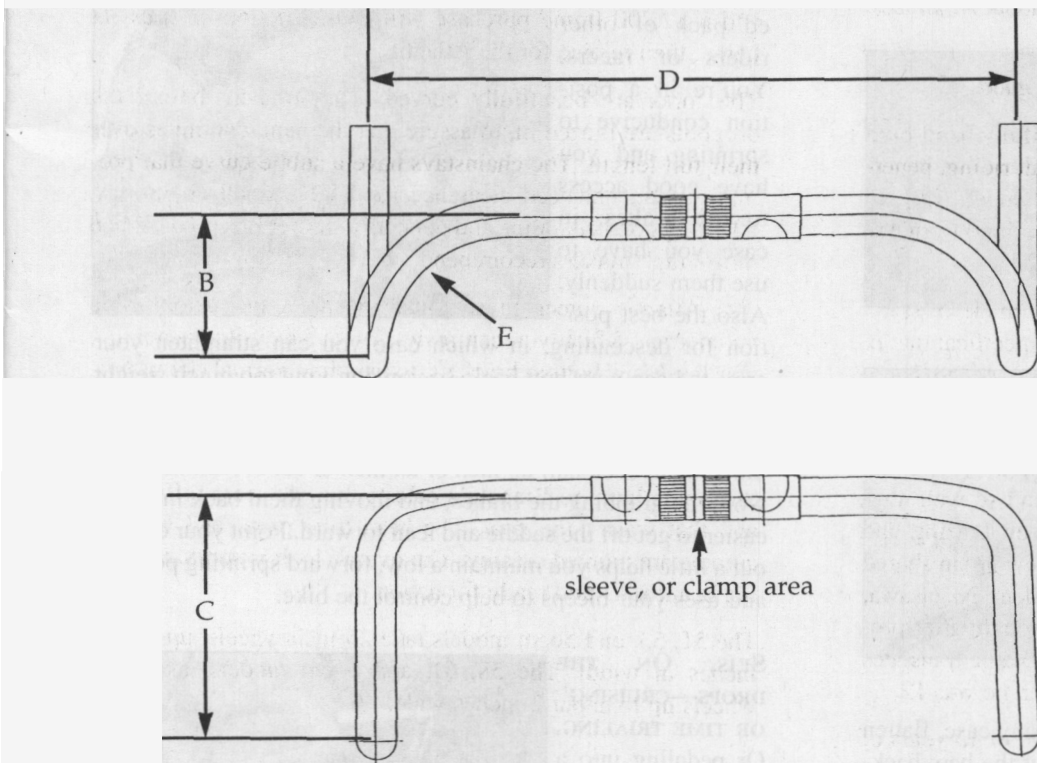
Frame size	Minimum	Maximum
51	76.4	78.9
53	78.3	80.8
56	81.2	83.7
58	83.2	84.6
61	86.1	87.6
64	89.0	90.4
68	96	97.4

-----> continued on page 18

Handlebars & Hand Positions

THE THING ABOUT CURVES IN BARS IS LOTS OF HAND POSITIONS. AS YOU MOVE YOUR HANDS, YOU EFFECTIVELY SHORTEN OR LENGTHEN THE DISTANCE TO THE BARS, AND IN DOING SO, CHANGE YOUR UPPER BODY POSITION TO ACCOMMODATE EASIER OR HARDER PEDALING. ANOTHER BENEFIT OF MULTIPLE HAND POSITIONS IS AVOIDANCE OF PAIN AND NUMBNESS. WHETHER ON DROPS OR MOUSTACHE HANDLEBARS, CURVES OFFER MORE PLACES TO PUT YOUR HANDS. CHANGING HAND POSITIONS FREQUENTLY IS A GOOD WAY TO AVOID HAND PROBLEMS, AND CURVES MAKE IT A LOT EASIER.

THE HAND POSITIONS SHOWN ON THE NEXT PAGE AREN'T THE ONLY WAYS TO GRAB A HANDLEBAR, BUT THEY WORK PRETTY WELL, AND THEY ILLUSTRATE THE VARIATIONS IN GRIP MADE POSSIBLE BY A HANDLEBAR WITH A LOT OF CURVES IN IT. THE ILLUSTRATIONS HERE SHOW A TYPICAL DROP BAR AND IDENTIFY DIFFERENT PORTIONS OF IT. WE MADE UP SOME OF THE NAMES, BECAUSE THERE WERE NONE.



A. The RAMP. Ramps vary in steepness, from about 15-degrees to 30-degrees. Flatter is more supportive and more comfortable, but if it's too flat, then other parts of the bar get messed up. We like to flatten the ramp by rotating the bars up in the stem slightly, maybe 10-degrees. Any more, and the lower portion of the bars (the drops) get too steep.

B. The REACH. Reaches vary from 65 in a child's or a women's-specific bar, to about 115mm in some extreme-reach bars from the past. But most handlebars these days vary in reach from 82mm to 100mm.

C. The DROP. Drop varies from 120mm to 175mm. A drop of 140mm is considered medium; 155mm and over is considered deep. The shallowest drops these days are on child's bars, women's-specific bars, and randonneur style bars. A typical

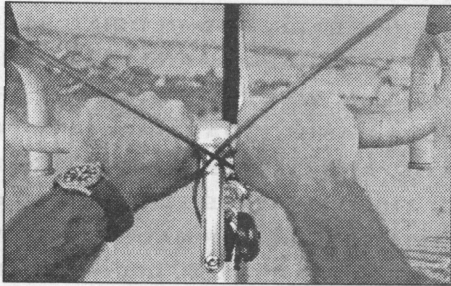
adult male's hand needs at least 140mm to be cozy/not cramped.

D. WIDTH. Narrow is 40cm or less. Medium is 42cm; wide is 44cm and wider. For the past million years, the rule has been to get handlebars the same width as your shoulders, but it's been our experience that almost everybody likes wider bars more. Wider bars both lighten the steering and make it easier to control a loaded bike, or a bike that's under the strong tilting influences of strong pedaling forces.

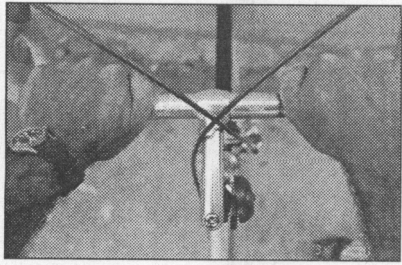
E. UPPER RADIUS. For a given bar width, the longer the upper flat section, the the tighter this radius. A longer flat section provides more places for your hands, and also tends to put the upper radius more under your hand, where it can provide support while you're climbing with your hands on the hoods.

≈ Six Grips for Six Purposes ≈

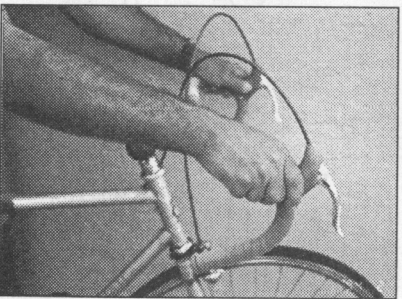
UNO. NEXT TO THE STEM. When you're sitting on the saddle and climbing steep hills, you're so tired that even your arms are tired, a mid-bar grip will help you pedal a straight line. You can pull back on the bars spasmodically, yet still exert little influence on the steering. Just what you want!



DOS. ON THE TOPS. Slow pedaling, easy cruising, usually a flat road, with low likelihood of sudden braking. Arms usually pretty straight, body usually as upright as possible. You're just riding along.

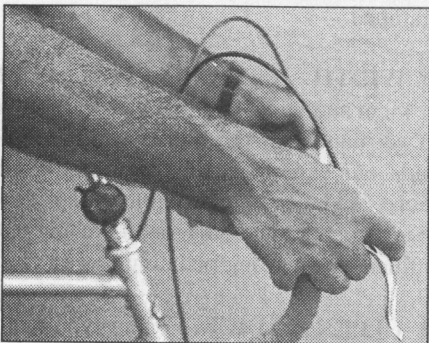


TRES. ON THE RAMPS. For slightly vigorous and harder pedaling. Your body is lower and more forward, some new muscles are kicking in to help your effort, and you're not catching as much wind as before.



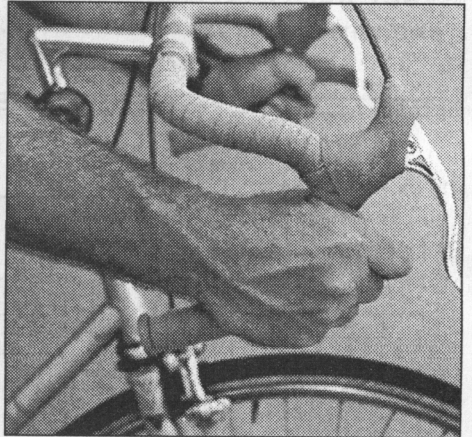
Some bars have steeper ramps than others. In any case, flatten the ramp area (lessen its steepness) by rotating the bars backward just a little, so that the end of the bars point toward the rear brakes, or about 25 to 30 percent down the seat stays.

QUATRO. ON THE HOODS. For fast riding on the flats, where your body is high and your arms become too close to you. And, for climbing hills off the saddle. Your thighs are the strongest muscles, and hard pedaling forces will pull the bike over unless you resist it with a good grip on the handlebar; which is where this grip comes in. It's not just a matter of



clenching the lever body—even with a light grip, you're still grabbing the bar at a place that gives you leverage against pedaling. It is commonly thought that wide bars "open up your chest" and improve breathing. Nobody advocates wide bars more than we do, but the breathing benefits are still dubious. If people in straightjackets can breathe, then the difference between a 44cm bar and a 42cm bar won't make any breathing difference.

CINCO. IN THE HOOKS. For all-out efforts in a crowded pack of other riders or racers. You're in a position conducive to sprinting and you have good access to the brakes, in case you have to use them suddenly. Also the best position for descending, in which case you can straighten your arms to keep your butt back, so you don't put too much weight onto the front wheel. This position gives the best access to road brake levers. Just reach out and squeeze them. For sprinting, move them back half an inch or an inch or so. Presumably you won't be grabbing the brakes, and moving them back makes it easier to get off the saddle and lean forward. Point your elbows out a little helps you maintain a low, forward sprinting position and uses your biceps to help control the bike.



SEIS. ON THE DROPS—CRUISING OR TIME TRIALING. Or pedaling into a headwind. This grip is similar also to the On the Ramps grip, in that your thumb and first section of Mr. Pointer take much of the weight. When the bars are high enough, it is easy to maintain a relaxed grip this way; but when the bars are too low, this grip collapses under the weight, and it's not so comfortable.



The Brompton

Most cyclists regard folders as good for a novel test-spin around an empty parking lot, but when it's time to ride, get a real bike. I did, for 30 years, but the Brompton straightened me out.

Andrew Ritchie first developed the Brompton more than 20 years ago, and the one you buy today is fundamentally identical. When you ride a Brompton, you are riding a highly evolved, thoroughly fine-tuned product of a guy who's really smart and has had lots of time to make it right. For what the Brompton is intended to be, it is perfect.

For me to actually like the bike, I had a few hurdles to get over. For one, I'm an idiot when it comes to internal gears, and the Brompton has Sturmey-Archer internals. So, when I flatted the rear tire and went to take off the rear wheel to fix it, the mess of weird plastic that comprises and encloses the gear shifting mechanism and the chain tensioner was as foreign to me as a lug is to Klein. I tried and failed to fix the flat while the rear wheel was still on the bike, so I was forced to read the Owners Manual. To make a long, long story short, I removed the wheel, had loose pieces everywhere, and still managed to get it all back together and working perfectly. If I can do it, anybody can.

The Brompton is not a folder in the same league as an S and S-coupled bike, or even a Bike Friday. Those are more normal-like, and if you're after a bike that feels 95 to 100% like a regular bike, and you're willing to spend 7 to 18 minutes folding it, and you're prepared to carry a bigger folded package, then they're good ones. But not all folders have that goal.

The Brompton is best suited to sub-ten mile rides, commutes and errands. It's a quick, tough, clever little luggage carrier that's a blast to ride and handles great. It's quicker than a lot of bikes, partly due to its small wheels. At first ride, it's startling, but you get used to it right away and come to like it. At least, I did.

Folding

It folds designed to fold to the size of carry-on luggage in just 20 seconds, and they're 20 simple, stress-free seconds. If you're slow it'll take you 30. If you're blind it'll take you 45. The Brompton folds fast and



The Full Brompty, with the front pannier, stuff on the rear rack, and duded up with a Brooks saddle. This bike is a gas to ride and useful tool.

gets small, so you can take it almost anywhere.

Lights, Fenders, Action

You can get it with fenders and mudflaps and a generator light and a rear rack and a front bag, so you can ride it in horrible weather. You can get it with neat, easy-on/easy-off capacious bags, so you can carry more than a grocery-bagsworth of groceries. If that's not enough, use the rear rack and haul up to 20 more pounds of gear. The Brompton is the worker-utility bike that just happens to be the smallest, easiest to fold folder out there. For luggage-hauling trips of 10 miles

or less combined with quick and easy folding to an incredibly compact size, the Brompton is the bike to beat.

I ride it a minimum of 120 miles a month. It's not my main bike, but for certain things, it's just right. I keep a front pannier on it, and the rear rack is ready for most things unexpected. It has fenders and lights, and I've made many nighttime shopping trips on it. My 12-year old Kate, who is 5-foot 2, alternates between it and her Priest-barred mountain bike on her rides to school. We can ride the same bike, because the Brompton fits riders under 5 feet and up to 6-5.

I have about seven bikes, and I'm glad one of them's a Brompton. For a fun-to-ride, quick-folding, superstar utility bike, it's the one to beat, and is a true original.

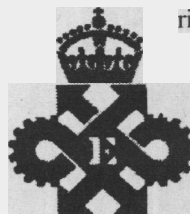
DETAILS

FRAME. Steel. Some of it is Reynolds 531. Made in England.

WHEELS. Two, 16 x 1 3/8-inch. Alloy rims, schrader valves, spokes. Various options available, wheelwise.

GEARING. Internal, 3- or 5-speed Sturmey-Archer. One chainring stock, but you can fit a double or triple. Stock gear ranges vary with the model and options, but generally are from the low-to-mid 40s to high 80s or low 90s. If you get the 3-speeder, you get the classic Sturmey-Archer trigger; the 5-speed, being more high tech, comes in resin, looks terrible, and works fine. Stunney-Archer just went out of business, may not be back, and Andrew Ritchie is looking at non-British alternatives.

COST. Between \$800 and \$1500, depending on options.



1995

THE QUEEN'S AWARD FOR
EXPORT ACHIEVEMENT

OPTIONS

REAR RACK AND GENERATOR LIGHT. There are lots of options on the Brompton, but they're based on just two models, a Light and a Touring. The Light lacks a rear rack and generator lights; the Touring has both. The rack looks capable of carrying heavy loads, but I've had just 25 pounds on mine.

BAGS. There are 3 options for front carrying bags:

- 1) An open-topped folding "basket" sized to carry a bag-and-a-halves worth of groceries;
- 2) A zipper-topped "pannier" bag that's not quite as deep, but at least won't let stuff get wet in the rain (I have that one);

3) A new, bigger pannier that carries a lot more stuff.

The bags are made by Carradice; the rack, by Nitto. The rack has a built-in handle for easy carrying. The saddle pouch in the picture below contains a cover, useful when you're packed on a train with a muddy bike. There's also an Ortlieb-made backpack option, and a Samsonite hard case you can trail behind the bike for even more stowage room, and stuff the bike inside when you need to. That way, you can check it in as luggage and not get stung for the bike fee.

GEARS. Either model can be had with 3 or 5 internal gears—82", 62", and 46" on the 3-speed, and 92-78-62-49-41 on the 5-

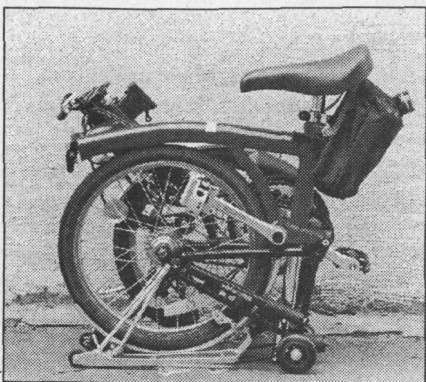
FOLDING



Step 1. Lift the bike and let the rear wheel flop underneath. Turn the front wheel a bit to the left so's the rear don't hit it. The bike rests on roller wheels, and is stable and ready for further folding.



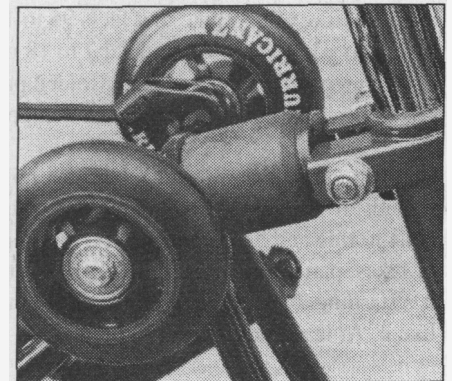
Step 2. Loosen the main frame joint and flop the front half of the bike backwards, hooking a special clip on the wheel axle over a chainstay.



Step 3. Loosen the handlebar joint and flop it down, engaging a clip that prevents it from loosening. Step 4. Then lower the saddle to lock it all in place.



Front view of the folded Brompton. The left pedal (as an option) folds flat.



The skate wheels become rollers for the folded bike. The black cylinder behind the seat cluster is a bumper-suspension.

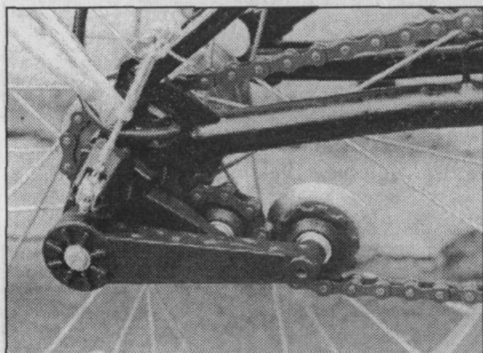
speed. Either model can be had with the same swoop of gears reduced by 18 percent. I assume that's with a different chain-wheel or a bigger rear cog.

OTHER. The brake is a Taiwanese-made Brompton-design dual-pivot sidepull, quite powerful. The crank is cheap-style, but works fine. The standard pedals are Taiwanese plastic Unions, but others will fit. There's a folding left pedal option, and that

one's aluminum, made just for Brompton.

There are many Brompton-specific parts, and all spares and replacements are available.

WEIGHT. About 24 1/2 pounds for the 3speed Touring model.

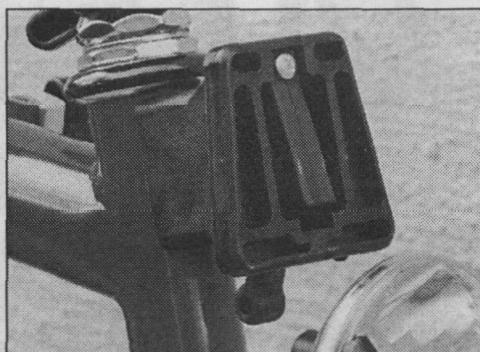


H. Here's the part that gives me the willies—the weird and unfamiliar chain tensioner and internal gearshift mechanism.

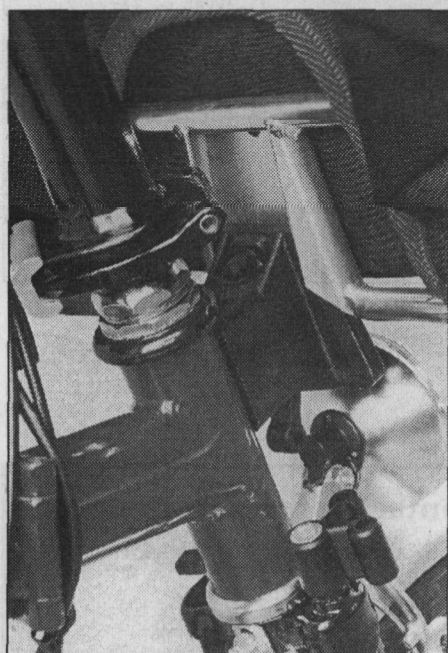
BROMPTON



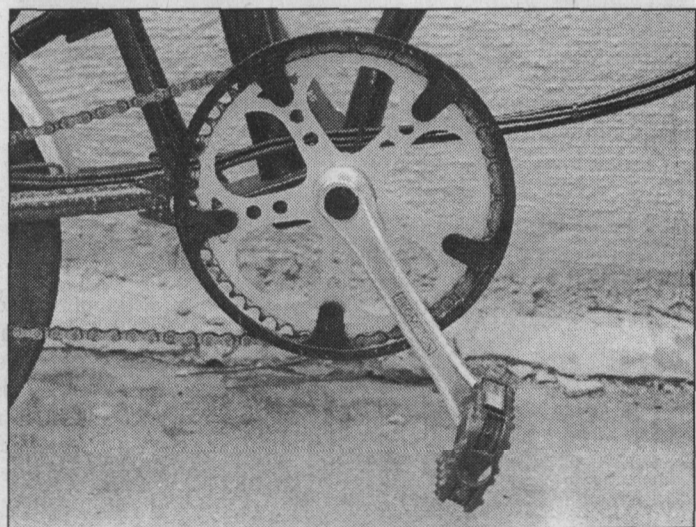
The 3-speed, the classic-and-now-dead-but-there-are-still-many-in-the-pipeline Strymey-Archer trigger shifter. Unchanged for a century or so. Strymey-Archer invented the planetary gear, without which your SUV wouldn't be able to wiggle its way through that preschool parking lot.



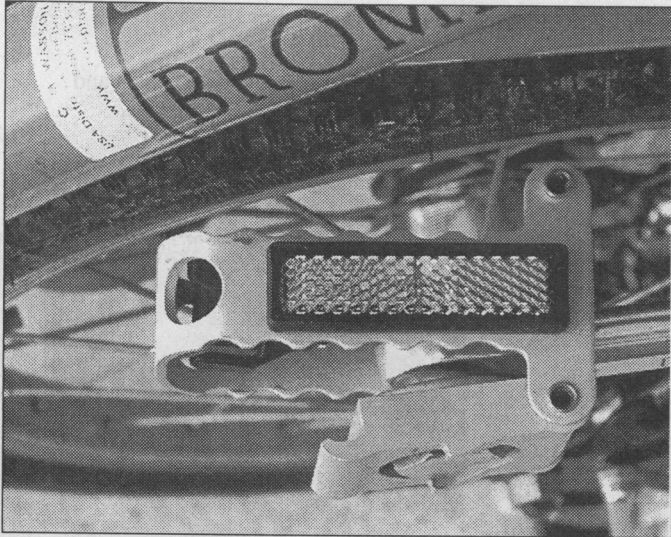
I. Here's the front pannier mounting block. It's a heft hunk of plastic.



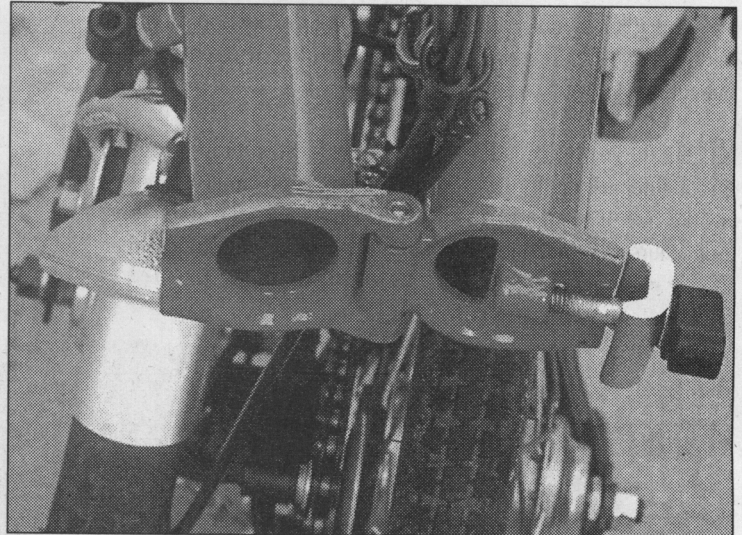
J. Here's the stout metal rack of the front pannier sliding solidly over the block. There's a trigger release below it, cleverly hidden from criminals who would have what is rightfully yours, yet convenient enough for a 2-second quick release.



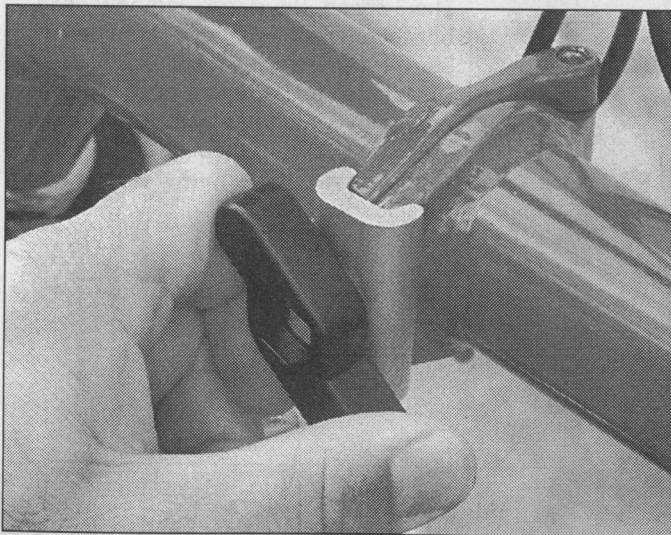
K. The Brompton crank has a good low Q Factor (150mm between the pedals), but other than that, is nothing to write home about; and the plastic pedals won't wow them at the bike show, either. But they work fine. It's a funny folder, after all!



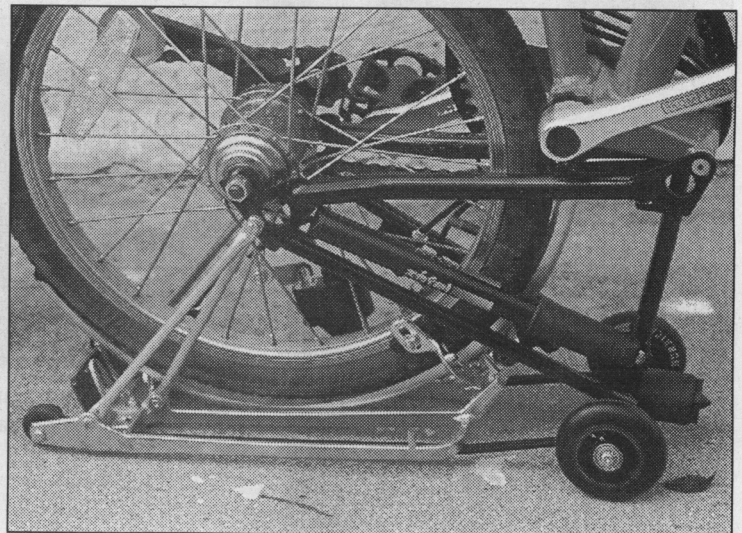
L. The optional folding pedal. The other one is plastic. Forget cycling shoes with these pedals. Rubber soles grip well, nothing else does



M. Here's a hinge, open. Raleigh copied this design many years ago, though not with Andrew Ritchie's blessing. It closes up securely, no problem.



N. Here's a hinge being closed. There's not a lock or anything, but you can tell when it's good and tight.



O. Parking detail. You lift up the rear end of the Brompton, and the rear wheel swings underneath it all.



P. An optional telescopic seat post extension accommodates guys with really long legs. You can also get a longer standard seat post. Oh heck—if you really want to know more, get a brochure from Channell Wassoon.

Contact Information

Brompton's U.S. agent: Channell Wasson

Telephone: (650) 321-0808

Fax: (650) 321-8375

Mail: C.M. Wasson Co.

423 Chaucer St.

Palo Alto, CA 94301

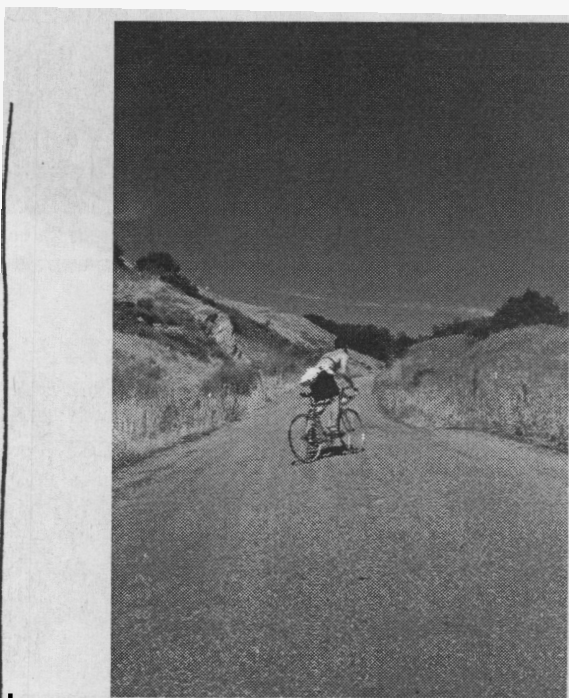
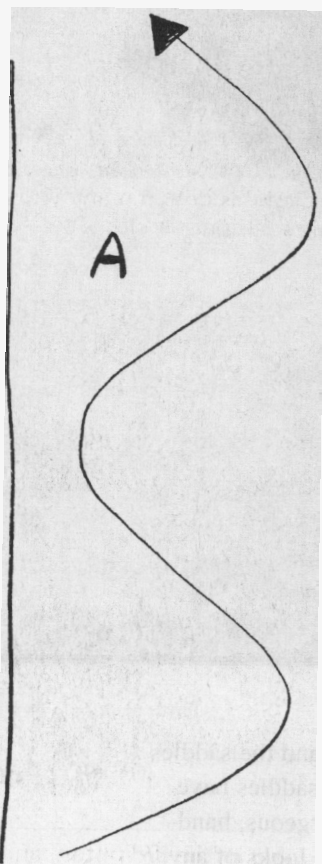
Email: Channell@Bromptonbike.com

www.bromptonbike.com

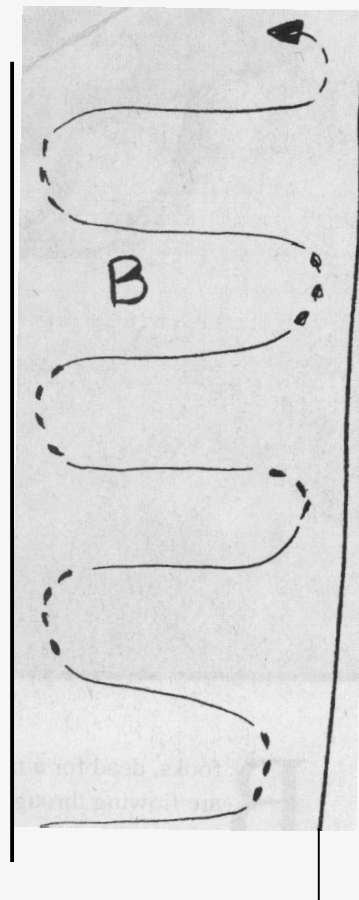
THE LOST ART OF THE TRAVERSE

TURN ANY CLIMB INTO A LONG AND WINDING ROAD

TRAVERSING CAN GET YOU UP A CLIMB THAT YOU'RE OVER GEARED FOR, UNDER LEGGED FOR, OR JUST TOO TIRED TO CLIMB STRAIGHT UP. YOU ALREADY KNOW HOW TO TRAVERSE, BECAUSE YOU DID IT WHEN YOU WERE A KID. BUT THEN YOU GREW UP, WATCHED THE TOUR TOO MANY TIMES, AND GOT IT INTO YOUR HEAD THAT TRAVERSING WAS NO LONGER ACCEPTABLE. VANQUISH THAT THOUGHT! TRAVERSING IS A USEFUL SKILL, AND IT'S FUN.



Here's Joetraversing his way up a really steep hill on a really hot day using style A when he probably should have been B-ing it. He's going about 3 miles an hour. The helmet's hanging from his handlebars, ready to be put on for the descent.



A. On a moderately steep hill, or when you're still feeling frisky, but not frisky enough to ride straight up, your cut angle can be moderate, and you adjust it to the slope. Obviously, traversing adds distance to any ride, but it's often better to effectively turn a 1-mile, 12-percent grade into a 2 mile grade of 6 percent.

B. On the steepest hills, you can either coast across (solid line) and accelerate up (dotted), or the other way around. I'm not sure which is better. I ride really steep hills a lot, and I haven't figured it out yet. Some rest time is essential, though, when the hill is really long and really steep.

Two More Things

1. If your bike has toe-clip overlap, time your pedal strokes so you don't hit the front wheel. It's not a major thing, it won't crash you, but slow-sharp turns on a steep traverse is one place where overlap becomes an issue. Make a game of not hitting. It's not a fantastic game, but it distracts you from the climb, and that can be helpful.
2. You can't traverse on loose dirt. Trails usually have high spots, where the looseness has washed away. Ride there.

Brooks is Back



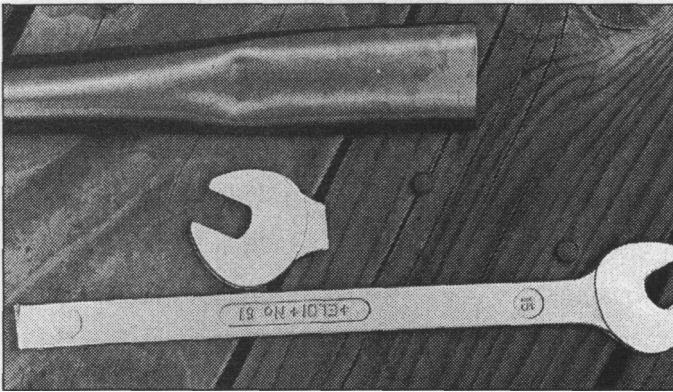
Brooks, dead for a month or two in September and October, is now back in business, and the saddles are flowing through again. Prices are higher now than they were before, but Brooks saddles have been underpriced for years, so don't be sad about the price increase. They're still gorgeous, hand-made saddles, they're still the most comfortable for most bottoms, and they still improve the looks of any bike. Our selection of Brooks saddles will grow over the next year, but for now we're concentrating on our favorite all-around model, the B.17. The versions we carry are spiffed up for us, with the premium grade leather, hand-set copper rivets, and a skived lower edge for looks. The brown one we have now has copper plated rails and frame. The grey one has titanium rails and frame. They darken with age and use, they break in after about 100 miles, and it's probably fair to say that most of you reading this right now have one and already know this.

- | | | |
|---|---------|-------|
| B. 17 Brown with copper-plated steel rails. | #11-006 | \$90 |
| B. 17 Grey with un-plated titanium rails. | #11-007 | \$150 |

MECHANIK'S CORNER

BY RIVENDELL'S OWN TRAVERSIN' JOE BAUDER

Before yesterday, I had a perfect track record as a mechanic. Nothing exciting, no tales from the glory days of ingenious tandem fixes or recumbent chain routing solutions, just a good string of decent work and a lot of well-built bikes for Rivendell. From the college bike shoppe to retail stores to Rivendell, no major mix-ups. Except for cross-threading that French suspension crank which was fixed with a Stein tool, nothing major. (It was a one-of-a-kind prototype, though—GP.) Steady with the wrench, slow and deliberate. Until yesterday .



The Eldi No. 61 pedal wrench wasn't long enough, so we sawed off the 9/16-inch end, and then squished a frame tube to make a cheater bar. For added leverage. It added another 20 inches, and still it took a full grunt to budge the pedal.

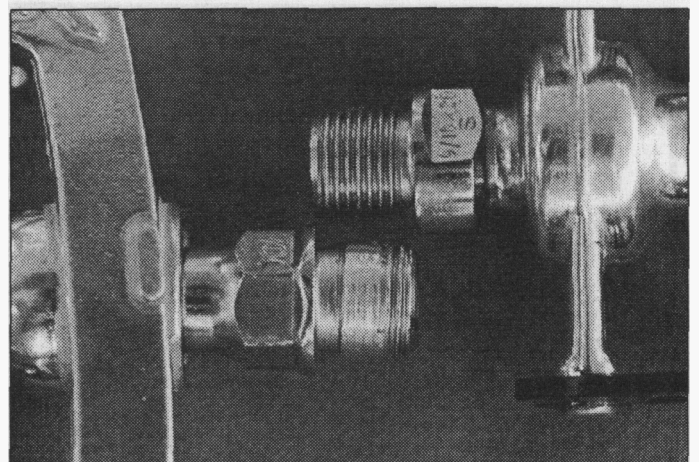
I installed the pedals a few days before, thinking the bike would be done the next day. Handlebar tape color questions arose, and the bike sat over the weekend. We usually use tester pedals, the same pedals every time, when we take a bike out for its' mandatory test ride, but this time all the pedals were on a Heron Grant rides, and so I installed some MKS platform pedals, which would be fine for a test ride.

A few days later, when the time came to remove the pedals for boxing the bike up, the drive side came off fine. The non-drive, however, started off wrong, very tight. Pedals install tightly in French cranks anyway - presumably they have a taller thread in there - so at first I wasn't worried. Then it got really hard, sweat-on-the-brow hard. I tried backing the pedal up and trying again, but it was harder to back up than to unthread. It started to dawn on me what was happening. Grant was around, so I enlisted his help - he's pretty helpful in gorilla-type work, and his mind is very engaged with what he does with his hands (maybe it's the machine-shop background) Jerome would have been a close second choice. So, while Grant made helpful tools, I got out my motorcycle gloves to protect my hands and pulled up on one side, pushed down on another. There was only one position where I could get enough leverage at all.

Grant came in to help, and squeezed an old tube into a cheater bar to put on the sawed-off end of an Eldi pedal wrench. (yes, we needed more leverage than the Mighty #61 could provide) Together we got the last few turns out of it, and I had to use both hands on the drive side to resist what he was doing on the other side.

What had happened was this; (Remember Encyclopedia Brown books? Where Encyclopedia Brown comes in and unravels the whole mess at the end and it all makes sense, and uncovers the really simple solution behind the mystery, giving a science lesson while he does it? Well, here it is:) The non-drive side pedal had **no grease**. Over the weekend, the steel threads on the pedal had seized with the aluminum of the crank arm, and when the pedal came out it pulled the threads right out of the crank arm. Those aluminum threads would rather go with the pedal than stay where they were in the crank. The threads on the platform pedal looked like they had JB Weld poured into them.

The non-drive-side crank was ruined, and on top of that, it was a TA Zephyr, unavailable until mid-Fall. We probably have a 170 Zephyr arm to replace it with, though. Lucky for me. I was pretty bummed out for the rest of the day, though - my streak was ruined, and I earned a spot in infamy. The lesson is: always, always, always, grease the pedal-axle interface. Any grease will do.



Top: What pedal threads look like when they haven't been munged up. Bottom: What they look like when they have. Only a few threads remain clear, the rest have extracted aluminum from the crank, and won't give it up. You can "know" to always grease (or beeswax) threads by reading it, or by being told it, but it won't really sink in until you don't do it, or see a picture of what happens when you don't.

Sizing the Atlantis

It's easy, there are lots of ways to do it, and they all end up with the same result. Keep in mind that there may be more than one size that'll work for you. If you can ride either a 56 or a 58, and you have a strong preference for 26-inch wheels, then go with the 56. You may have to use a taller stem to get the bars up where you want them, but it won't require any extreme stem to do that. If you're a woman, get the smaller of two acceptable sizes, and then use a taller stem to get the bars up high enough.

Sizing Method 1: By saddle height

Use this method only if you know your best saddle height—the distance between the center of the bottom bracket and the top of the saddle. If not, skip to Method 2.

Saddle height	Atlantis size	Wheels
54-66	47	26-inch wheels
56-70	51	26-inch wheels
59-72	53	26-inch wheels
62-75	56	26-inch wheels
64-77	58	700c wheels
67-80	61	700c wheels
69-83	64	700c wheels
65+	68	700c wheels

Get the smaller of two sizes if you're a woman, or if you plan to ride the fattest tires. Get the larger if you plan to ride small to midsized tires—26 x 1.5 or smaller, or up to 700x38.

Method 2: By Pubic Bone Height

To measure your PBH: Stand in bare feet, 10-inches apart, hard floor. Hook the lip of a metal tape between two slats of wood (or equivalent). With one hand in front and one behind, pull up until you hit BONE. Have your helper take the reading on the floor. Do 3x and go by the highest reading.

PBH	Atlantis size	Wheels
74-76	47	26-inch wheels
76-80	51	26-inch wheels
79-82	53	26-inch wheels
82-85	56	26-inch wheels
84-87	58	700c wheels
87-90	61	700c wheels
89-93	64	700c wheels
95+*	68	700c wheels

*If your pubic bone is higher than 100, you might as well get a 68cm Atlantis, because no other bike will fit you.

Atlantis Order/Reserve Form

A \$200 non-refundable deposit reserves you a frame on the next production run. (January or March delivery). The frame and fork cost \$950, with headset. If you're interested in a complete bicycle, note so below and we'll send you the kit and build information. Generally, a complete Atlantis built (+\$210), boxed, and delivered, will run around \$2,000 to \$2,200, depending on your choice of parts. We have a standard Atlantis package that guarantees you a perfectly functioning, high quality, low-maintenance/hassle bike. Details on our web page or on request.

Name _____ ; Height in Feet/Inches _____
 Customer No.? _____ Age _____ ; Saddle Height (cm. or inches x 2.54) _____
 Ship to: _____ ; PBH in cm _____ Frame size: _____
 _____ ; Would you prefer we pick the size? _____

\$200 non-refundable deposit

_____ check enclosed ; After we receive your deposit, we'll send you a receipt and a note/update about what to expect next.
 _____ visa/mastercard # _____ ; **Mail or fax this to:**
 expires _____ signed _____ ; RBW/Atlantis Box 5289 Walnut Creek, CA 94596
 ; Fax: 1 (877) 269-5847. Questions? (925) 933-7304

Rear Rack Review

THIS IS THE FIRST OR SECOND REVIEW, BUT EQUIPMENT REVIEWS WILL BE A REGULAR FEATURE FROM NOW ON. WE WON'T DO HUGE, BROAD, SWEEPING REVIEWS OF EVERY EXAMPLE AVAILABLE IN A PARTICULAR CATEGORY; AND WE WON'T REVIEW ANYTHING WE DON'T LIKE, OR USE THE READER TO HURT THE FEELINGS OF THE PEOPLE WHO MAKE OR MARKET THINGS WE DON'T LIKE. THERE'S SOME GOOD STUFF OUT THERE.

With the right rack and strap-down system, you can carry almost anything on a rack, and in many countries of the world, they do—cardboard, pigs, bananas, lumber, weapons and ammo, and other people. Most of those racks are heavy gauge steel and weigh about seven pounds each. They're not the kind of rack you'd want to put onto a fancy or lightweight bike, and you can't go out and buy them at a bike shop, either. But the idea is the same, and the point is well made: Racks make bikes more useful. Everybody needs at least one bike with a rack on it.

Seven Things To Consider In a Rear Rack

The Shape of the sides. Racks can be divided into to categories. V-shaped racks, and Squarish ones. The Squarish ones are better because they support panniers better. They're better at preventing wobbles. This review covers only square-sided racks because they're the best kind.

Strength & rigidity. The joints should be strong, because that's where the stress is (same as in a bike frame, or a bridge). A rigid rack reduces flex, and therefore stress at the joints, and helps keep the load from wobbling. On the other hand, a rigid rack with weak joints can be worse than a flexy rack with weak joints, because rack flex can absorb some of the stress that a more rigid rack would deliver to the joints. Racks get strength and rigidity by good welds, large diameter tubes or rods, and triangulation or cross-bracing.

Mounting & Adjustability. If you buy a rack off the shelf, it won't just pop onto your frame as though it were made for it. Don't be surprised if you have to modify the metal or supply some of your own hardware; not because the maker's out to get you, but because the rack wasn't designed specifically for your bike.

Weight. An extra pound or even pound and a half of rack weight isn't important if it adds security. Would you rather carry 35 pounds and worry, or 36.5 lbs and not?

Platform Size. They're all big enough to hold a sleeping bag, and that's big enough. Jandd is the biggest, but is no better for that. For hauling non-touring loads, a bigger platform might be more important, but for normal touring stuff, no big deal. We list the platform dimensions just because it seems odd not to.

Spread at the Dropouts. Ideally, the inside-to-inside dimension of the rack would match the outside-to-outside dimension of your frame's rack eyelets. The closer these to dimensions are to one another, the less you have to spread or squeeze the

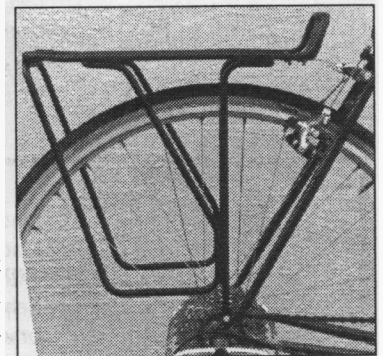
rack. Standard forged steel dropouts are 7mm thick, so on a standard modern road bike, the ideal rack dimension is 130mm (inside to inside rear dropout space) + (2x7mm) = 144mm. On a 135mm rear spaced bike (common), it would be 149mm.

The Missing Test. Probably the most important test for racks is fatigue resistance, since when racks break, it's almost always due to fatigue. Even so, a solid connection to your bike can prevent flex that might lead to fatigue, and racks have been known to fail simply because a mounting bolt came loose, or wasn't tightened enough in the first place. Use Loctite or Beeswax and lock washers, and prepare to supply them yourself.

THE JANDD EXPEDITION

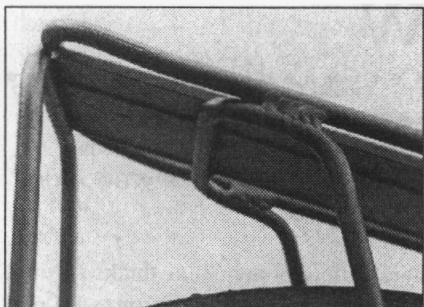
Jandd is a neat company, I think, and in the world of mass-produced nylon packs with plastic buckles, nylon zippers, and velcro, it's hard to find better without going custom.

The racks are the stars, though, and are as good as aluminum racks get. The wide (as opposed to V-shaped) bag-support areas are smart. The bags won't wobble, and they lend themselves to being laced with rope or webbing, for pannierless touring (as espoused in RR18). Unlike most aluminum racks, the bars on Jandds are solid, 3/8-inch bars. They won't buckle. They're heavier, but you can trust them with a way heavier load than you ought to take, and probably forever. The welds certainly look strong. They're black, bulky, beefy workhorses—



A perfect shape, solidly built. Has anybody ever broken one? Doubtful! Heavy gauge aluminum rod.

not the ticket for your all chrome Alex Singer touring/show bike, but for hauling pigs to the 4-H show, or self-contained expedition touring, these are hard to beat. They aren't obvious clones of any other rack. It's as though Jandd sat down and pounded a gavel and said, "Let's make the strongest and most reliable aluminum rack in the world! Cost and weight don't matter, and there's nobody out there to copy to get a start on this, so we're on our own!" It may not have been anything like that, but judging from the rack, it could have been.



The Expedition model has strong welds and an extra support under the platform., allowing the transport of hogs to market.

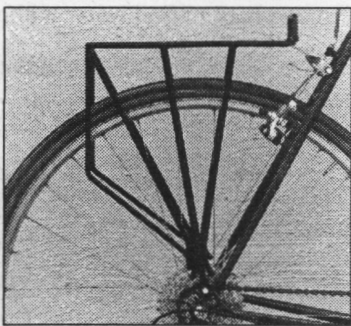
Mounting instructions were good. The only suggestions I'd make to Jandd are to supply it with rack-adjuster bolts that take a 4- or 5mm wrench, not a 3, for heaven's sake. Or use an 8mm hex head bolt. Those bolts on this rack are like kite string

Where to buy, what they cost: Any Jandd dealer, about \$65.

BLACKBURN EX-2 EXPEDITION

It was inevitable that as the competition heated up, Blackburn would reevaluate its rear racks and come out with a better one. The EX-2 is Blackburn's best design yet, since it braces the rear bags against wobbling better than its predecessors do.

For more than a quarter century, Blackburn kept the same V-shaped side struts, which fall into the category of "bad ideas that work pretty well most of the time, anyway." I rode across the country with one, and so did tens of thousands of others, and they did well. So, every once in a while it's good to stop being an arm-chair theoretician/critic, and judge something by its success, and if you do that, then the original Blackburn is a fine rack. And, if the original was fine, then the EX-2 is super-fine.



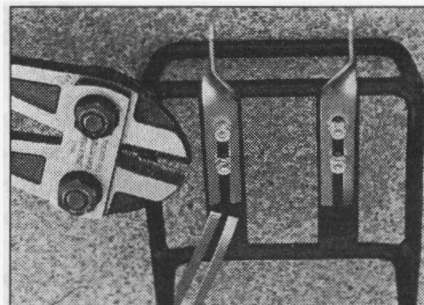
Blackburn's best design for heavy loads, because it's the only one with a broad, squarish shape, to help stabilize panniers. Lots of bracing here.

The EX-2 is lighter and less substantial than the Jandd Expedition. The welds aren't as neat or as big. The Blackburn may still be strong enough, though.

The rear spread on the EX-2 I received was 119mm. I easily spread it to fit the 144mm rack spacing (130mm hub spread plus 2x7mm rack eyelet width) on a Heron Touring bike. No doubt the rack would stretch to accommodate a wider frame, but at some point, as you spread the rack wider and wider, the flats on the mounting holes are no longer parallel to the eyelets on your frame, and so...why didn't they build the rack wider?

The mounting hardware and procedure is virtually identical to the Jandd, with tiny 3mm button-head bolts for the adjustable sliders, dagnabbit. The adjusting sliders were way too long for a 58cm Atlantis, and had to be cut down, and bolt cutters work

way faster than a hacksaw. Blackburn might want to include another, shorter set, since if they had to be cut for the Atlantis, they'll have to be cut for many others, too.



Under the rack, stamped into one of the platform cross-bars, are the letters USA. The rack packaging says Made in Taiwan. It would be more appropriate to stamp in Taiwan than USA, since they are made in Taiwan.

The adjusting bars are the flat-twisted steel kind, similar to those used by Jandd and Gordon, also. They came quite long and had to be cut to size. Not a huge deal. I think they were sized for dinky mountain bikes, with low and far-forward seat stays.

Overall, this is the best designed touring rack ever offered by a company with a great record of making touring racks. I realize that some of the hiccups in it may make it seem inferior to some of the other racks, but left all alone, it's a great rack.

The instructions didn't suggest that you may have to cut the adjusting sliders down to size, but you may have to, because I did. Bolt-cutters make it short work, but who has those around? They should provide shorter sliders, or at least tell you you might have to chop them down.

Where to buy and what they cost

Most bicycle shops sell Blackburn, Bell, Rhode Gear, and Vista Light products, so if you see any of these in the shop, ask about the Blackburn EX-2. If they say *the what?*, tell them you read all about it in the Rivendell Reader. When they say *the what?* again, say, "The EX-2 is a new Blackburn Rack. I realize that you don't have it, but was wondering whether or not I could order one through you, since you sell Blackburn stuff." They cost about \$50.

TUBUS CARGO

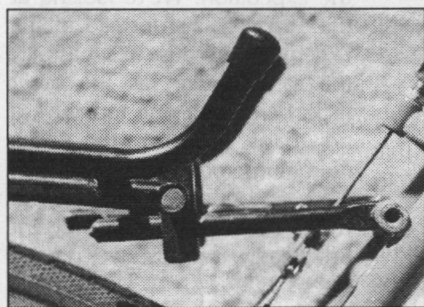
Tubus racks are welded in Germany out of superlight (0.5mm) tubular CrMo steel. That seems too thin, and I can't verify that without scraping off the powder coating, but they sure are light. At 11lb 60z, they seem unnecessarily light for a rugged touring rack, but as long as they don't break (see below), no problem. The welds seem neat enough, and are less bulky than the aluminum welds on Blackburn and Jandd racks; that's not a good or a bad point, just an observation, and it probably has something to do with them being steel.

Other than the one we bought—the most popular model, called the Cargo—I've never seen one on a bike or knowingly spoken to anybody who has used one. But the fact that they're made in Germany and cost a lot suggests that they're probably strong. They mount easily, with round sliders and set screws,

as opposed to the flat, twisted spring steel sliders used by Blackburn, Jandd, and Gordon. One can make a theoretical case for round rod being superior to the twisted steel, but the twisted steel is still really strong, and I've never seen one break. Nevertheless, round rod is a good way to go.

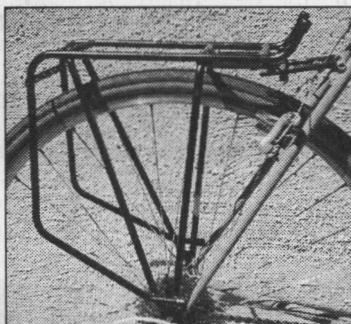
Tubus racks are a cinch to mount, and they come with good instructions. I had to cut down the adjuster rods, but the instructions say outright that that might be the case, and it was easy with a hacksaw. If mounting Tubus racks confounds you, you should not tour, because touring demands innovative solutions to the myriad problems that inevitably come up.

The only theoretical weak point I can come up with is the set screws, but that's looking hard for something that might not even be there. The set screws allow you to move the adjuster rods in and out until you get a perfect mating-up with your frame's hourglass rack mounts or seat stays,



The Tubus, like the Nitto and Sakkit, uses adjusting rods, as opposed to twisted flat steel. The instructions noted they might have to be cut, and that was right. Like the Sakkit, the adjusting rods are held in place with tiny set screws. Unlike the Sakkit, they were at least metric! No biggie.

gouge a dent into the other tube, and stay in the dent, rather than sliding all over the place. If I'd seen this before we had Nitto make the racks, I might have suggested a more flexible system than what we got. Nitto's solution to the adjustability issue is to offer different adjusting rods, and an attachment arrangement that allows you to mount them on either side (inside or outside) a brazed-on plate. It is not as easy as the Tubus Way, but there are no set screws to lose, either. On the other hand, if you lose a set screw, you could get by with tape, wire, or cord, until you got another set screw at a hardware store, and next time, put Loctite on it.



The Tubus Cargo rack comes sized for either 26-inch or 700c wheels. We got one sized for 26-inchers, and here it is mounted on a 700c wheeled Atlantis. It works well with tires up to about 700x38, and would be my first choice for that size.

and then you screw in the set screws to hold that position. A set screw, in this case, is a screw with a point on it that runs into the tube on the Tubus that the adjuster rods slide on, the idea being that you slide the adjusting/connecting rods in or out until they line up with the mounting points on the seat stays, and then the pointy point of the set screw will

The Tubus Cargo is available for either 700c or 26-inch wheels, and we got the latter. Another popular model, the Fly, is less supportive, even lighter, and is made for fast people who don't have to carry much stuff. Why not a saddlebag?

Tubus racks are distributed by Ortlieb USA in Seattle. Ortlieb is a German pannier maker, and they make some bags that are quite waterproof and fancy and of course fit nicely onto the Tubus racks. Good instructions.

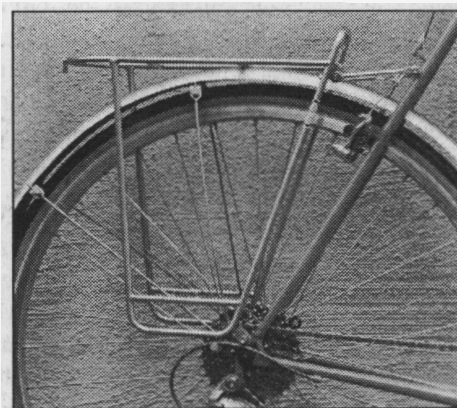
Where to buy and what they cost: Any Ortlieb dealer, about \$100. If you can't find an Ortlieb dealer, call Ortlieb USA (425) 251-3939 for the name of a dealer.

NITTO

We sell Nitto racks and have always been Nitto's biggest fans, so if that disqualifies this review, skip it. What makes it worse is that these racks are our own design. We'll be as objective as possible.

The Nitto rear rack is tubular CrMo steel, thicker in wall than the Tubus, and it weighs more. Of all the racks mentioned, it is the only one that's nickel plated to a soft, satiny silver finish. You might hate that look, but we don't. The joints are fillet-brazed and beautiful. You might hate that look, but we don't. It is available in two sizes — medium, to fit frames up to about 57cm, and most 26-inch wheel bikes;

and large, for bigger frames. Making two sizes allows Nitto to maximize the length of the platform. With one-size-Fitall™ designs, the forward end of the platform has to be located in a place that won't get bumped by the seat stays, and consequently, the platform is shorter than it needs to be. You might like that feature, but we don't.



The Nitto Carnpee is longer and wider than most rear racks, and is the best looking. Fillet-brazed tubular CrMo.

The wide bag supporting sides don't let bags wiggle on the rack, and lend themselves to lacing for pannierless touring (see RRI 8).

The connecting/adjusting rods, the things that join the rack to the seat stays, are round, solid aluminum. Tubular steel with a solid business end would be better, but these work fine and don't break. The rack comes with two different sets of rods, and between these and using either the inside or outside mounts on the rack itself, you'll be able to get a good fit on just about any bike. It's not as adjustable as the Tubus system, and

if we'd seen the Tubus system earlier, we'd have done something like they do. But once it's connected up, the current Nitto system is solid.

The 9mm tubes are thicker than some, but not as thick as Gordon's. The problem with Nitto racks is availability and instructions. We're working on both.

Where to buy, what they cost

Rivendell, about \$115, expect major delays if we're out of stock, but right now our stock is pretty good.

BRUCE GORDON

Bruce Gordon deserves tons of credit for raising the bar on rack quality and bringing people's attention to it. He is the Modern Day Father of the Great Rear Rack. His racks are super. They are tig-welded from 3/8-inch tubular CrMo, and have a broad support area for stabilizing the panniers.

You can't easily find Gordon racks in stores, because there are 18 different racks that cover most bikes out there; and they do customs (for tandems with wide rear axles), too. You can order racks direct from Bruce Gordon Cycles (707) 762-5601 or off of their website, but they need three measurements: Frame size, center-to-center (center of bb to the intersection of the seat tube and top tube centerlines); chainstay length, and rack eyelet on dropout to rack mount on seat stay. If you have any questions, call up Bruce and have him coach you through it.

The racks are powder coated shiny black. They're light. I've never heard of one breaking, but anything can break, so even if you've seen it happen, there's no need to write in about it. There are 18 models, and if you supply B.G. with some frame specs, you'll get the right one. The instructions are good.

In July 2000, they cost \$125. Don't rely on us for the price or ordering information. The phone number is right; call them direct and see where it goes.

Where to buy and what they cost

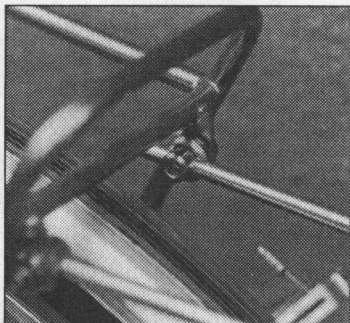
Bruce Gordon Cycles, Petaluma, CA 707 762-5601. About \$125.

TOPEAK

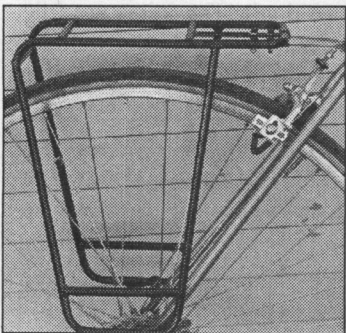
Topeak (toe-peek? top-peak? I've heard it both ways) is a Taiwanese company that, if my information is correct was started by a former parts and accessories (p&a) designer for Giant bicycles. Whatever—Topeak p&a look like they came from the same compulsive mind, with their fanatical attention to detail that inspires envy and nausea, depending on your attitude toward the natural world. Wedge packs that do everything but balance your checkbook; multitools that do everything including balance your check book and fluff your pillow. I look at them and don't know whether to scream. *Why didn't I think of that? (because I'm too dumb) or Stop! Enough already! Live in the real world NOW!*

If any company's designs scream CAD, Topeak is it. It's not bad. The fellow, whoever he is, is one of the most clever and prolific designers in the bicycle world today. He should take a break for a decade.

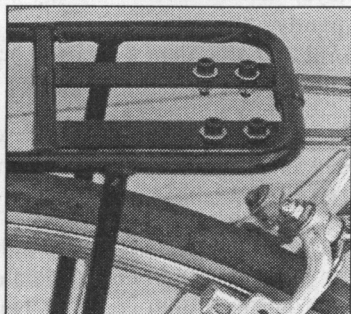
The Super Tourist rack is pretty nice. It's steel, and that alone scores two points out of a possible two before it even leaves the gate. It's black, so take away a quarter point. It's adjustable and Topeak's unique adjusting system is smart and one hundred percent chimp-compatible. Good work!



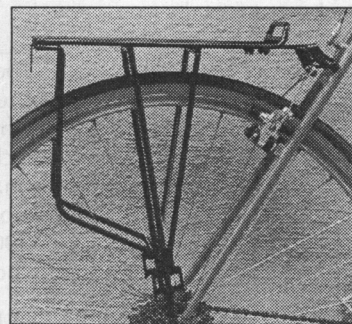
The adjusting rods are not as inwardly and outwardly adjustable as others, but the rack comes with a few different shapes that accommodate 90 percent of the bikes out there. Still, some additional method of lateral adjustment would be a good idea.



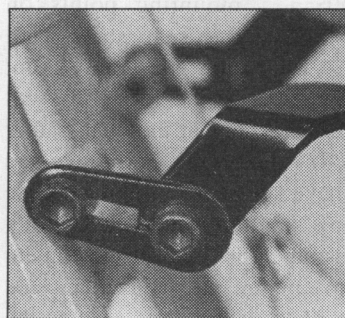
Simple shape, works well. The second lightest rack in the bunch. Rack weight doesn't matter that much, but it's a rock-solid rack, too.



The flat-twisted steel adjusters on the Gordon are usually seen on cheaper racks, but they work perfectly, and that's that.



Topeak's Super Tourist rack is its second-stoutest rack, just behind the Expedition. We're looking at the Super Tourist instead of the Expedition because it's basically the same design as the other racks here, with one top shelf, and bags go on the side. Aluminum rods with steel hardware, and of all the racks, it was by far the easiest to install. It went on so easily, it almost gave me the creeps.



Topeak's unique adjusting system is smart and one hundred percent chimp-compatible. Good work!

easy as pie to set up, but the price it pays for adjustability is a less than ideal profile on a roadish 26-inch wheel bike; it sits up higher than necessary for function or looks.

The Topeak is shamefully easy to set up and almost infinitely adjustable. The instructions are crystal clear even if they aren't in fantastic English.

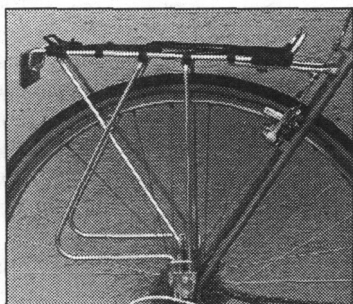
Where to buy, what they cost

Most bike shops sell at least some Topeak stuff, and if they don't have this rack, they can order it. About \$50.

ZEFAL SAFARI

This is the least expensive rack in the bunch, and it has the most different design, and it is the best value. The other racks are welded or brazed, but the Zefal is put together with plastic fittings which enclose the solid aluminum rods. In the ranks of rack material, aluminum ranks right down there at the bottom, but since the ranks are so small, all that means is it's not as good as steel. But smart rack makers can make good racks out of it.

On paper, 8mm solid-aluminum racks don't rate nearly as high as fatter, 9mm to 10mm racks of tubular CrMo. In fact, it's easy to build a case against solid, 8mm aluminum as a rack material. It is not as rigid. It is not as strong. It is just cheaper.



But the Zefal feels absolutely rigid. It doesn't move when you grab it and try to wiggle it. You feel like you're going to rip off

It's French, but looks and feels German. The funny-shaped sides support bags well and reduce wobbling. A comes-with-it rear reflector gives the drunks something to hone in on.

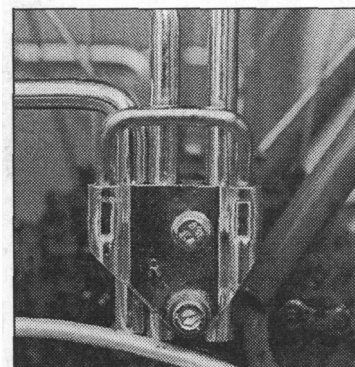
the braze-ons or dropout eyelets before this rack budges. The rigidity comes by way of the design.

Where the support rods join the platform, they pass through stout aluminum tubes, partially lined with some kind of black plastic. I imagine the plastic stops wear by reducing friction. It seems like a good use of plastic, and that's coming from a real plastic-phobe.

I was skeptical about how well the weird-shaped sides would hold our new Baggins rear bags. A squarish shape is easier, but these are easy enough, and when you run the compression straps around them as you're supposed to do, all's well.

The neatest thing about this rack, and it seems to be a feature on all Zefal racks, is the built-in rubber strap on top. Half of it comes off to allow you to put a load in there, then strap it

down. It's adjustable, simple, strong, and effective. The rubber is flat and high-friction, so loads don't shift. I like it so much that I put on on a Nitto rack on another bike. It's far more convenient than separate bungs or straps. It's faster, easier, better.



The Zefal Safari's weak point, and this is a minor one, is its looks. Because it's black and silver, it doesn't blend in as much as all one-color racks. It's busier-looking, and not soft or gentle-looking, so if you care about things like that, it's best used on a loaded tourer or a commute bike. For a commute bike that doesn't have a saddlebag, it would be my first choice. For a loaded tourer, it's right up there, too.

The strutholder at the bottom houses all three struts. Then you bolt this thing to the dropouts.

Where to buy, what they cost

Not many bike shops have these. Zefal is a well-known brand among old time bikies, but not new ones. This rack is just different enough to be ignored, and it probably doesn't help that we don't have the Zefal habit yet, and people buying an inexpensive rack generally want a more familiar name. Call your local shop, or try us. We've started carrying this one, because it's such a groovy rack and a great value. It's only \$45. What a great deal.

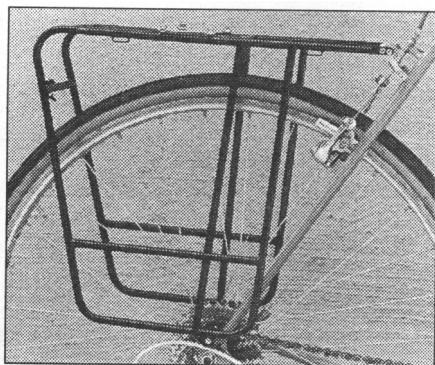
BECKMAN SAKKIT

Robert Beckman is an extreme, perfectionist, opinionated, eccentric, cyclist-sewer-fabricator and innovator. He got famous-in-small-circles in the early '80s, with his Needleworks brand panniers, which later became Beckmans. They quickly became and remain the ultimate fancy-smart-strong pannier for the gentry, or for normal folks who can save and scrimp and after about six full moons, plunk down the wad for the best nylon panniers out there. Until maybe 4 years ago, Bob and Bruce Gordon had a professional relationship, in which Bob's bags were made for Bruce's racks; and they referred customers to each other, and so on. But both Bob and Bruce are intelligent and opinionated and individualistic in their thinking, which isn't a bad thing at all, but for anybody who's spoken to either for any length of time, it isn't surprising that eventually they went their own way. So now Bob makes racks and bags, and Bruce makes bags and racks.

Every review of Bob's bags talks about them as though they were made out of solid gold for King Tut. If you want pockets and features, you've got them. If there's a feature you think YOU need, Bob thought of it first and it's there, better than it needs to be. If there's a feature you think you need and it's not

on his bags, then you're wrong about needing it. To top it off, Bob sews the bags himself.

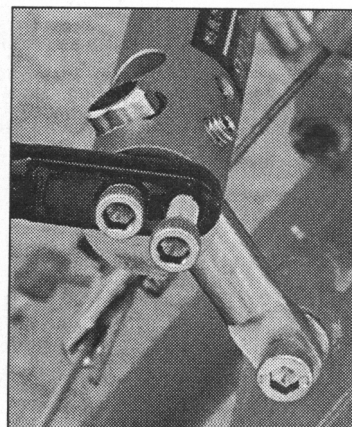
His standard rear rack, and costs \$175. He makes many models, up to \$1295 for the Sakkit Signature model—the rack Bill Gates and the Oracle guy are talking about going halvesies on. There's a lot of work in these racks, and Bob does it all himself when he's not sewing panniers. The



Big, broad, beautiful and strong. The wide supports of the Sakkit make the other racks look diminutive. Current models are fillet-brazed, as are the Nittos. There's a Vista light attachment down low, out of the way of any rear load you might put on there. We should move the Nitto's down there, too. Thanks for the tip, Bob.

joints, formerly tig-welded, are now fillet brazed. One of his racks has 20 braze-ons for anything you could ever think of. But the designs are simple enough. The broad sides stabilize panniers. The extra struts reinforce it. The black powder coating is some kind of "special process" that costs ten times what normal powder coating costs. Mounting is easy. They come with several pages and a few thousand words of instructions, but I never read instructions, and they went on easily. I had to cut the two adjusting rods down to length, not a big deal. Like the Tubus rack, it uses set screws to hold the rack to the adjuster rods. A 2mm was too small, a 3mm was too big, so I went to the hardware store for a 2.5mm, and it didn't fit, either. That's when I figured out that they weren't metric. I asked Bob about it, and he said, "the metric ones cost a lot more." I'd be willing to be that if bite the bullet and get the \$1295 model, he'll arrange for it to come with metric set-screws.

Beckman's brochure is lengthy and extreme, full of type, details, observations, opinions (he doesn't like low-riders, and tells you why), information, and declarations. If you didn't already know that regular old \$45 racks do the job, you might read it and assume they'd wobble and break under the weight of a styro-foam brick. They won't, but at some point, under some conditions, after a certain amount of miles and years if you use them long and hard enough...the Sakkit racks by Beckman will outlast them.



The attachment/adjustment method on the Sakkit is weird but good. Beckman supplies you with a drill and tap and an assortment of non-metric allens (which I didn't see until I had a chance to complain about the non-metricness). The round "Pivot bar" is undergoing some minor changes. The adjusting rods had to be cut, no biggie. It comes with about 8 pages of instructions, none of which I used. Despite the overkill design and presentation, you can be a chimp-like-me and still get it together easily.

Where to buy and what they cost

Direct from Bob: He's in Bend, Oregon. Phone (541) 388-5146. Get his brochure, first. Offer to pay \$5 for it. There's some good information in there, and it's entertaining reading.

HERE'S A CHART

	Spread as purchased*	Weight lb-oz	Material	Color	Finish	Platform (inches)
NITTO	141	1-13	CrMo	Silver	Nickel plated	5.3 x 13
BLACKBURN	119	1-14	Al	Black	Powder	4.75 x 12
TOPEAK	135	1-14.5	Al	Black	Powder	5 x 12.25
JANDD	150	2-11	Al	Black	Powder?	9 x 15
TUBUS	132	1-6	CrMo	Black	Powder	4.75 x 12.5
GORDON	137	1-6.5	CrMo	Black	Powder	5 x 13
SAKKIT STD	158	2-6	CrMo	Black	SuperPowder	5.25 x 15
ZEFAL SAFARI	136	2-1.3	Al	Silver	Shiny	5.875 x 15



Inside the poncho you get a waist-tie and thumb loops to keep the poncho from flying up.

Where Have All the Ponchos Gone?

In the mid-'70s you could go into any bike shop and buy a bike poncho. Now all you get are jackets. We still have ponchos, but they're not in the catalogue..

For 90 percent of the rain riding I do, I much prefer a poncho to any other rain garment. It ventilates much better, so I don't get all steamed up inside it. It's like an umbrella over my body. It takes a while to get used to not being able to see the bike beneath you, but if you're already comfortable on a bike, then you know where the controls are, and you'll have no problem adapting to not being able to see them. They're still there when you reach for them.

The poncho-as-umbrella works so well that, if you have fenders on your bike also, you can pretty much ride for an hour in the rain and hardly get any rain on your legs at all.

Absolutely your thighs are covered—no chance or the rain getting to them. You might get a little wet on your feet, but it'll just be a little, and you can always wear booties. Most of the time, it's not necessary.

On long climbs, a poncho beats the pants off a rain jacket, because it vents so well. If you're climbing amid scattered showers, you're stuck in your jacket. You can vent it at the arms and front, but you're pretty much still inside it, and get-

ting all hot. Do you take it off and get rained on when it starts up again, or do you leave it on, get hotter, and then hope it rains so you aren't in a quandary?

With a poncho, you just sort of grab it up and hoist it over your shoulders during the dry spells, and let it flop down again if it starts to rain. Every time you lift it up, you get a waft of cool, refreshing air.

You never see racers in poncho, because ponchos are not good for high-speed riding. They catch too much wind, which also makes them not *so* good for fast descents, where the back tends to fly up and expose your behind. Bike ponchos have waist ties inside to minimize this, but it still happens. If we ever do our own poncho, we'll get it with a pocket in back. Fill it up and it'll stay down. You could sew one on yourself, or rubber-band on a big marble. It wouldn't take much.

The Carradice model we sell works well. It has no hood, so get a helmet cover. It's neon chartreuse and made of some kind of European polyester that I haven't seen over here before. It's completely waterproof, and packs up small. One size fits most.

part no. 21-127 \$60

Who Rides a Rivendell?



TOM TRUONG'S RIVENDELL

A Good, Eclectic Mix, and a one-of-a-kind bike.

Headset:Dura-Ace
 Stem:Nitto Pearl
 Bars:Nitto Dream
 Seat Post:Campy Record
 Saddle:Brooks B.17
 Brake levers:SunTour Superbe
 Brakes:Campy Record (Cobalto)

Front Der:Mavic SSC
 Rear Der:Shimano XTR Medium cage
 Shifters:SunTour bar-end, friction
 Crank:Shimano Ultegra 53x39
 BB:Shimano Dura-Ace
 Wheels:Phil hubs, Mavic Open 4
 Tires:Conti 700x28R, 23F

Name: Tom Truong

Lives In: Northern California

Occupation: Architect

Family: Single

Favorite shoes: Asics running shoes

Favorite food: Vietnamese, Italian, other ethnic

Three good movies: The Last Emperor, Blade Runner, Raising Arizona

Years riding a bike as an adult: 21

Bikes owned: Rivendell, Masi, Serotta, Time, Colnago, Cuevas, Electra Cruiser

Favorite type of riding: Day-longride with some good hills

Riding days per week: 5 to 6

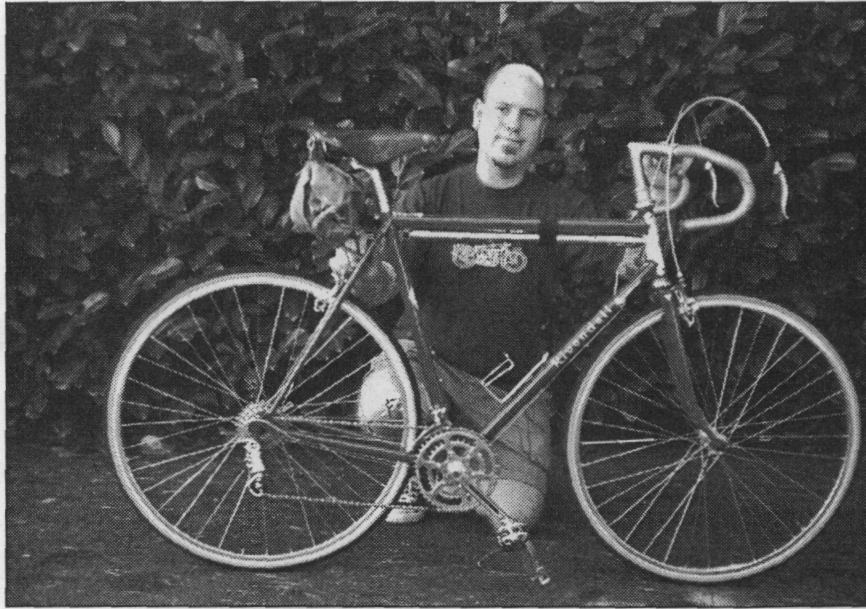
Dream bike ride or bike vacation: Italy for 2 months, hotels & credit card touring

Dream vacation, no riding: Egypt, Turkey, any pacific island, Brazil, Iceland, or Alaska

Type of music preferred: Blues and jazz

Why a Rivendell? I wanted a bike for the downhills ahead (literally and figuratively); one that's easy to handle and easy on the eye.

Who Rides a Rivendell & Plays Drums?



AARON MLASKO'S RIVENDELL ROAD

Headset:Tange Roller-Ball
 Stem:Nitto Technomic Deluxe
 Bars:Nitto #185, 44cm
 Seat Post:Nitto
 Saddle:Brooks B.17
 Brake:SunTour Cyclone
 Shifters:SunTour Sprint downtube
 Front Der:Campy N.R.

Rear Der:Campy N.R.
 Crank:TA Cyclo Tourist, 46x33
 BB:Phil 116mm
 Rear Gears:7sp fw, 13-28
 Wheels:Phil and SunTour hubs,
 Sun CR-18 rims, Panaracer 700x32 tires.
 Pedals:Campy S1 with steel clips
 Other:Silca pump, Ale cage, etc

My name is Aaron Mlasko. I'm 27 and live in Seattle, with my nifty wife of 7 years, Amy. I own and operate a small boutique drum business called Seattle Drumworks, where I build my own line of custom drums, called Mlasko Quality Custom Drums. I also repair drums and work as a drum technician on other musicians' records, and live performances all over the place. When I'm not dealing with other people's drums, I deal with my own in a band called Blue Collar Love. If you like catchy pop rock and have a computer, look up bluecollarlove.home.mindspring.com.

I've liked bikes for a long time. I grew up in Lewiston, Idaho and rode and raced around there when I was a kid. I even won the first mountain bike race I entered. But in high school I felt I had to pick between bikes and drums, and taking my genetic makeup into account, I decided on the drums. I sold my Waterford-built Schwinn and started playing with anyone and everyone I could. I feel lucky to be able to do what I do best, for a living. And, it puts me in some really exciting places. My

love for bikes is in full swing again, though. It frees my mind from drums, drums, and more drums just enough to let me stay sane while still being part of the music world.

My Rivendell is by far the nicest riding bike I've ever owned, and I've had a few nice ones. I built it up with NOS (new, old-stock) goodies that took me a while to find. I may tweak it here and there, but I really love this bike. I took a really long time to decide on the gearing. I wanted this to be a classic road bike, which explains the Campy Nuovo Record parts and the TA crank. What I finally ended up with gives me adequate high and low gearing for riding around Seattle without making my knees too angry; and the gearing stays within the published capacity of that darn Nuovo Record rear derailleur. If you're wavering on the edge of deciding whether or not to spring for a "lifetime" bike like this, just go for it. You won't regret it.

Atlantises and Herons also look good to me; maybe later.

A Very Well-Mannered Ballooner



This 56cm Atlantis, built up with a B.66 saddle, Nitto Technomic stem, Priest Bars, mountain levers, and 26x1.9 Avocet Cross tires, is the most versatile bike here at Rivendell, and the most fun to ride downtown, for errands, and to the post office. The Brompton's right up there, though.

I think everyone needs a bike set up this way. Look at the relationship of bars and saddle. You can't help but sit straight up, like a witch. The sprung B.66 saddle is made to support all that weight, and it feels like a chair. There is no weight at all on your hands. You can see forever down the road, because your head is about 9-inches higher than it is while you're just standing around doing nothing. It's fun to be that high. It feels really good in traffic, too.

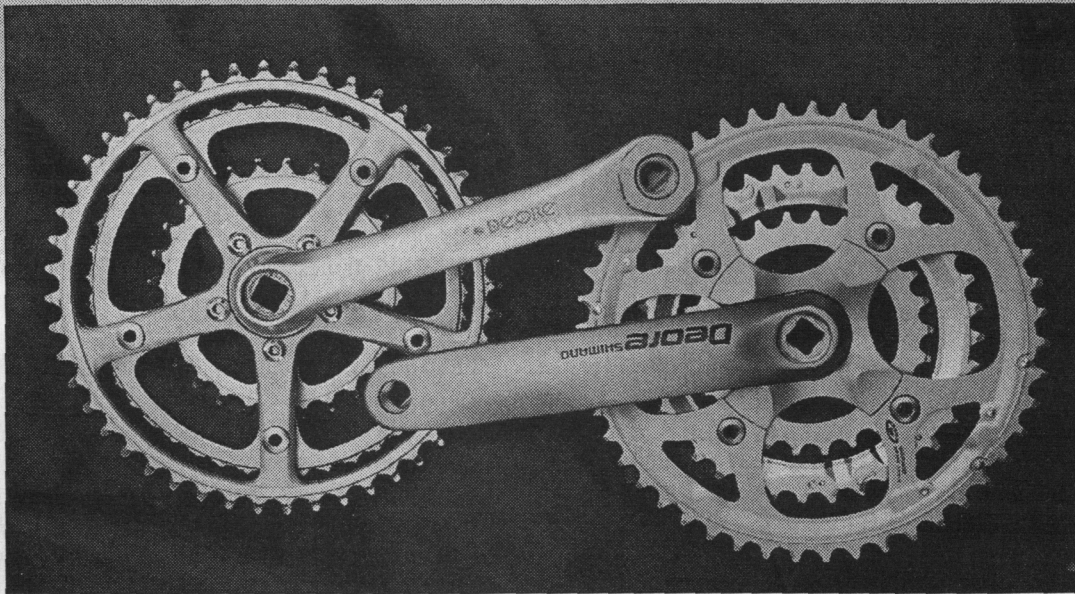
Robert (Pineapple Bob) here can ride it, and he usually rides a 53. Bhima, who is getting a 67cm All-Rounder, can ride it, and the seat post isn't even maxed out. One of the benefits of the Priest bar and the tall stem is vertical adjustability. Bhima's position on it isn't all that different than anybody else's. Priest bars feel the same to almost everybody, and they aren't as sensitive to height variations. So, you get a bike like this, and lots of people can ride it. If you have a long, steep hill to climb—one that's so steep you have to get off the saddle and put all your weight and might into the pedals, then lower the bars.

For most riding, it's good with toe clips but without straps. That way, you just slip your feet in, and you can even do that from the side. Casual riding, who needs straps?

It's not good only for casual riding, though, and ride it with toes clips a lot, too. I have a loop through the neighborhoods, over the hills, and up the second steepest hill in Lafayette, a 1.2 mile climb that averages about 18 percent. I don't know how long the ride is, but it takes me 43 minutes on my road bike when I'm pushing it, and 53 minutes on this ballooner when I'm cruising. I imagine I could narrow the gap some, but on a bike like this, I don't feel like pushing it; and that's a good thing. I like the climb, and it takes me about 9 minutes on my road bike. Nine minutes of 168 heart beats per minute. I don't need my heart to beat that fast, but that's where it always is on my road bike, in the 36x21 or the 26x21. I'd rather it not be that high, and last longer, and the ballooner does that for me. In a 24 x 28 on the ballooner, the climb takes 13 minutes and my heart rate is 145 to 150. I don't always wear a heart monitor, but I have bad genetics and had a scare last year, so I like to know what's happening. I think it's better for me to go 13 minutes at 150 than 9 at 168. So on this ride, which I do 2-3 times a week, the ballooner is the better bike. I don't have anybody to keep up with.

The grips are many layers of cloth tape, shellacked. It feels good. I don't know what the bike weighs, but it feels light when I ride it.

A Tale of Two Deores



Separated by 22 years. One's a nice road touring crank, the other's a mountain bike crank.

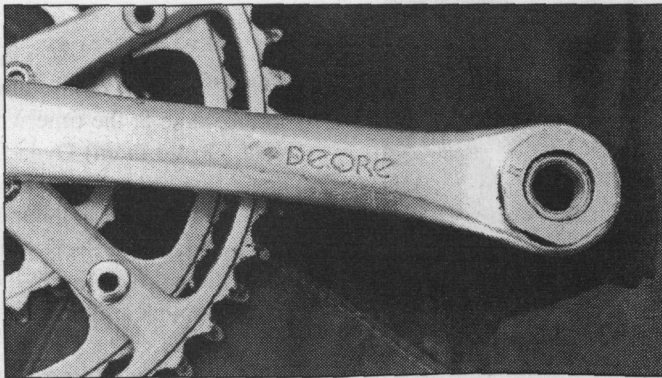
Here are two cranks, both Shimano Deore. Each was the only Deore Shimano made in the years they were made. One is from 1977, or pretty darn close to that; and the other is this year's. This is a story of the differences. It's not "Look how far we've come," or the opposite, but there will be a little of one of those, as we compare the two cranks.

Mostly, I find the differences in the cranks interesting from the perspective of looking at the market at the time each was made, and recognizing how Shimano tailors its designs to what it sees as the happening trends (as it should). These cranks illustrate how dollar-to-yen exchange rates affect Japanese products imported to America. In 1977 one American Buck bought close to 290 Japanese Yen, compared to 107 now. Such a strong dollar made it easy and profitable for Japanese companies to pull out the stops, and to focus on quality more than on manufacturing economics.

Material and Method

1977: Forged aluminum. It appears to be cold-forged, but Shimano has often been secretive about its manufacturing processes. I remember in the late '80s when I was a product manager for Bridgestone, I'd try to get as much technical infor-

mation as I could about the bike parts. Most makers just told me—cold forged, hot forged, melt forged, whatever. Shimano's pat answer was "Shimano's Special Process," and that was that. Based on the arm thickness, and the fact that it was an upper-end Shimano crank made at a time when the dollar was strong and the yen was weak, I'm guess it's cold-forged.



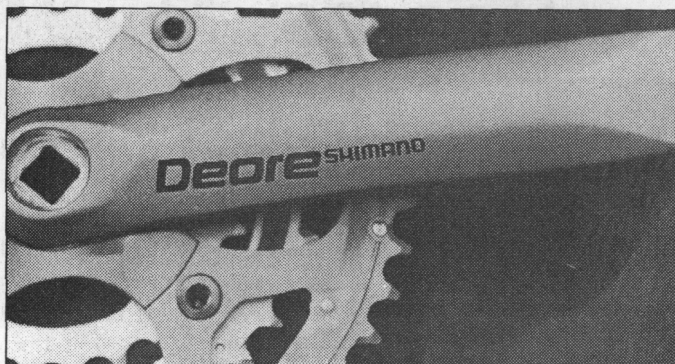
The old Deore was silver, anodized, and had a low-key engraved Deore. Don't look at the funny pedal thing. That's covered in another photo.

2000: Hollow-forged. It is unclear whether this means cold-forged or hot-forged, or maybe by calling it "hollow-forged" they skirt the issue on the side. I'm curious about "hollow-forging," because forging is a high impact stamping process, and to create the hollow means something has to be there to keep the arms hollow. And what material is strong enough to do that? Steel? And how do they extract whatever it is that creates the hollow?

I have no doubt that "hollow-forged" cranks are strong, light, stiff, and whatever else they're supposed to be, but I'd sure like to know how they do it."

Finish Quality

1977: On a scale to 12, where 12 is a Miche crank, and 10 is a Campy Record, Shimano Dura-Ace, or T.A. Zephyr (maybe a 10.5), these are a 7.



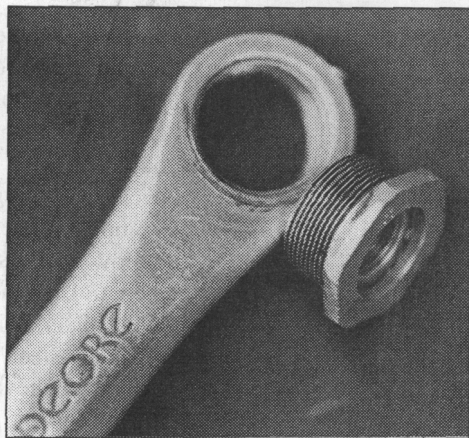
The new Deore is sort of champagne silver color, no doubt a special process. The logo is screened on. That's not heinous, just cheaper.

2000: These are a 3.5. They're smooth, but they're painted or somehow finished to look like paint. It's a dull matt finish with a hint of copper, or champagne. A bit weird, if you ask me.

Bolt Circle Diameters and Chaining Availability

1977: 130 x 74. This crank was designed in the golden age of U.S. Touring, likely in response to Frank Berto's many technical articles in *Bicycling*, and Frank was and still is a half-step+granny gearing fan. So this crank came, believe it or not, with 48 x 43 x 26 chainrings; and you could get rings of any size for it. We sang and danced forever and a day.

At first, second, third, and fourth glance, it looks like a TA Cyclotourist copy. Then you realize it has an extra spider arm, and that the chainrings attach differently than they do on the TA. You wouldn't be able to get middle and outer rings for it now, but at the time, easy.



2000: Strictly a mountain bike crank, with the here-today, who-knows-about-tomorrow 104/64 bolt circle diameters. It comes with 44 x 32 x 22 rings, and you won't find many others that fit it. Shimano makes either a 46t or 48t

For a few years there in the late '70s, Shimano did this to its best cranks. They made the pedal hole big, to stiffen the connection between crank and pedal. Engineeringwise, it was a good idea, but they should've added more surrounding metal, since every so often a crank broke. Still, a good idea. The funny piece you see there is an adapter Shimano made, so if you didn't go for the oddball pedals, you could use your own. It was a nice thing to do.

in XTR, but it retails for more than \$100, which takes some of the pleasure out. If you spring for it anyway, you'd better put on a 34t or larger middle. But you won't find one. I think Shimano should make one by "special process."

Weight

1977:

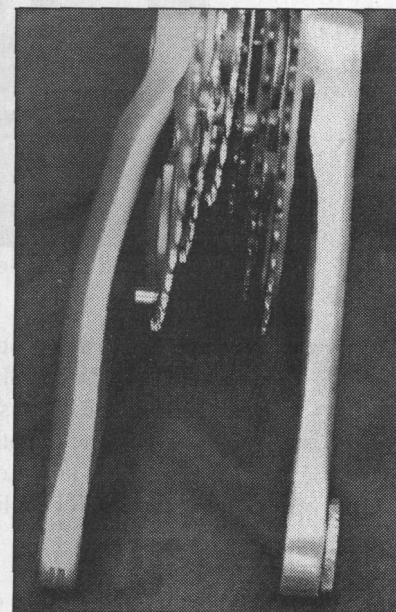
2000:

Q-Factor

1977: 145. It was designed for road frames, so it didn't have to be wide to clear the chainstays.

2000: 179. It is designed for mountain bike frames, which are often really wide at the CAPP (Cappy, or Crank Arm Passing Point).

The modern Deore, like most modern cranks, has a bowed out arm, which is why even with a 110mm bottom bracket spindle, the Q factor is still 179mm. The older Deore has a straight arm, typical of older cranks, which is one reason why, even with a 120mm bottom bracket, the Q factor is about 145mm.



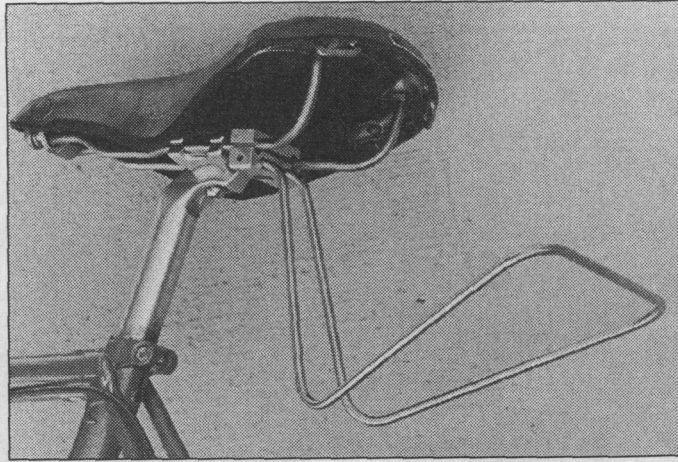
Incidentals

1977: See that funny thing outside the pedal hole? Well, this crank came at the time when Shimano was pushing its wacky (but I loved them) Dyna-Drive pedals, which, instead of having a tiny little threaded axle (9/16"), had a huge one, twice as big or more. It was incompatible with other pedals unless you got an adapter for normal pedals, and that's what the step there is. It did not increase Q-factor; the pedal still mounted flush to the real crank arm. It was nice of Shimano to make the adapter.

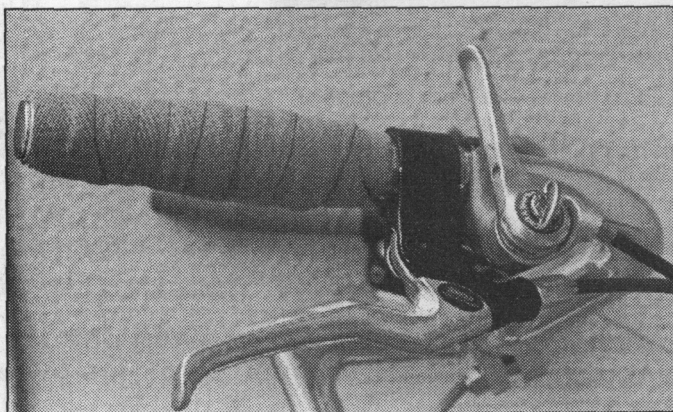
2000: A chunky crank with a weird finish and huge, silk screened Deore. Once you're over the finish, which isn't bad, just isn't beautiful, the most striking thing about this crank is the bent-like-bananas arms. They are responsible for the higher-than-a-mallard's Q-factor. Granted, they're designed for widebody mountain frames, and some of those may need it. But when you mount them on a road frame, my gosh—the crank arms clear the chainstays by an inch or so. This crank got rave reviews in an English cycling magazine. They liked the stiffness. Has anybody ever pedaled a crank that wasn't stiff?

A New Kind of Saddlebag Support & Another Project

EDBRO INNOVATIONS, a new Scottish company has a saddlebag support called the Bagman. Three versions, all basically the same, and the design is good. Shown here. Costs about \$25. Call them up in the morning US time to get them in the late afternoon. Be prepared to speak Scottish. If you live in the U.S. dial 011-44-1436 673 775. They don't take credit cards, so work out something else. The Bagman, like the Nitto Uplift, holds the bag



more vertically, and prevents it from dragging on a high tire (if you have a low saddle on a small bike and you ride 700c wheels, you need this). It seems to be sized for low-saddles and small bikes, and if you put a Camper on it, the lower support part sort of pushes the bag up, and it flops over the sides. That's not a problem, and it still carries well. The instructions say that if you have a saddle without loops, zip-tie the saddlebag to your seat rails.



We're working on a mount to convert SunTour Sprint downtube shifters to top-mount shifters. Andrew, a machinist (he would say "former machinist"), engineering student, and part-time Rivendell shipper, carved up assorted bike parts and fastened them together with nuts, bolts, and epoxy, and came up with this rough but fully functional shifter. It's shown here against a cork bulletin board and on a Priest bar. Ordinarily, first versions of long-term projects miss the mark by a mile, but not this one. It's fantastic. We're working with Dia-Compe/Dia-Tech to actually produce it. The one you see



here can be mounted inside or outside the handlebar, and both work great. Currently there are no nice looking and high quality thumb shifters made, and for Priest bars and flat bars, they're a good way to go. Things like this can take a year or more to get off the ground, but we can wait. Ultimately you'll be able to take SunTour Sprint downtube shifters and mount them on the down tube, on the handlebar ends (SuperMix bar-ends), or on Priest or flat bars. It will likely be sized for a road handlebar, and come with shims to make it work on a standard 22.2mm Priest or flat bar.



The Baggins Candy Bar Bag, loaded for bear.

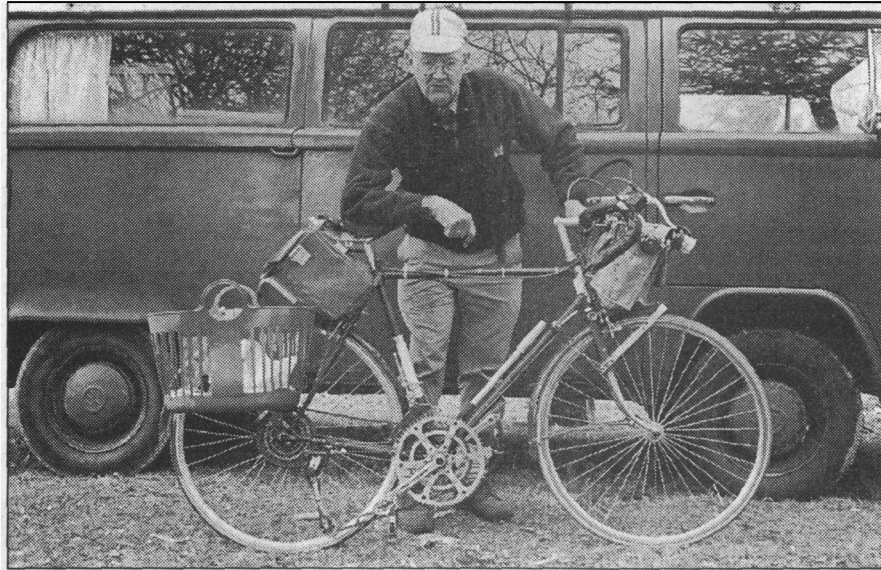
The Baggins Candy Bar Bag

Modeled after the cheap, funky handlebar bags of the '70s, but upgraded considerably with stout cotton duck, leather, and brass. No plastic, nothing crummy—it's a Baggins, for crying out loud! Big enough to hold a day's worth of your favorite food, and once you've eaten that all up, it'll hold your wallet, clothing, tools, and stuff. Mounts easily on ANY handlebar. Khaki. Get one!

#20-060 \$35

BY TOM GENSEMER

CHUCK'S BIKE

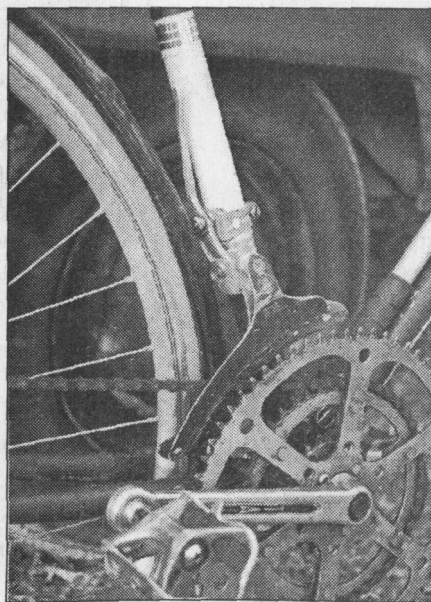


Chuck Harris and his everyday bike, which, like most bikes, is a work in progress.

THIS IS OUR SECOND STORY ON CHUCK HARRIS, BUT IT STILL DOESN'T COME CLOSE TO "COVERING" HIM IN ANY WAY. CHUCK IS AS CLOSE TO BEING A BICYCLE AS A PERSON CAN BE. HE'S AN INNOVATOR, A DO-IT-YOURSELF-ER, AND IS AS MUCH AN AMERICAN BIKE HERO AS ANYBODY I KNOW OF. HIS BIKES ARE FUNCTIONAL-WACKY. HERE, MEMBER TOM GENSEMER PROFILES CHUCK AND SHOWS US A FEW CLOSE-UPS OF HIS EVERYDAY BIKE.

CHUCK IS ALSO THE CHUCK HARRIS BEHIND OUR REAR VIEW MIRRORS. HE MAKES EACH ONE BY HAND, STILL, GRINDING THEM OUT ON A PEDAL-POWERED DEVICE THAT'S NATURALLY OF HIS OWN MAKING. —GRANT

Chuck Harris owned the bike shop in Gambier, Ohio, when I was a child. I'll always remember watching him ride up Brooklyn Street hill on his way to work. He rode a little bike with 20-inch wheels, the seat jacked up about a foot higher than the frame; and he pulled a four by eight foot trailer loaded to the top with bikes. The bicycle's gearing was so low that he probably couldn't exceed a couple of miles per hour. I bought my first ten-speed, a Fuji, from him, and later bought a Nishiki touring bike that I rode all over the country. Since I moved back to Knox county several years ago, Chuck has kept me well supplied with new and used mid-'70s Shimano and SunTour parts, and piles of wisdom and advice born of 40 years experience building, selling, fixing, riding, living, and breathing bicycles. Last Saturday afternoon, I stopped over and talked to Chuck and took these photos of his bikes.



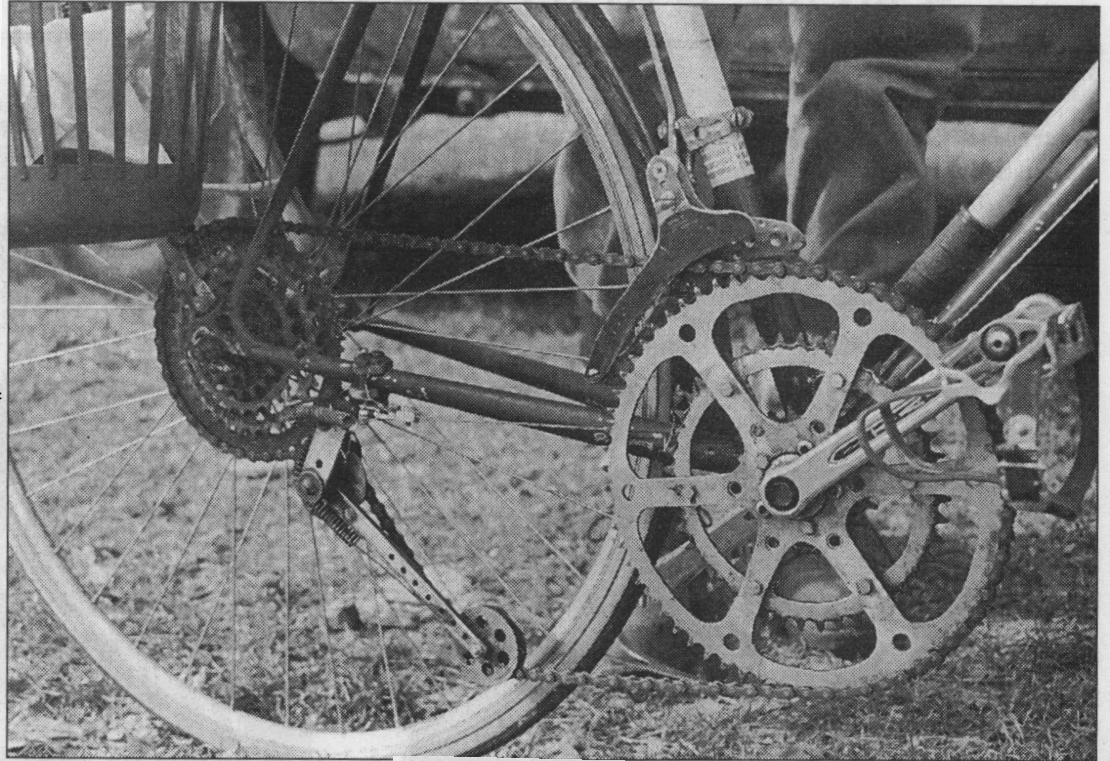
Chuck's front derailleur. To shift this front derailleur, you reach down and push the chain using the long lever.

The most striking feature on all of Chuck's bikes is the gearing. As Chuck puts it, "I like a wide range of gears." The 64-44-24 chainrings and 13x42 6-speed freewheel certainly accomplish that, but they also require custom derailleurs, which Chuck makes himself.

Chuck built his first rear derailleur while he was in college in Worcester, Mass. He caught the hosteling bug, as opposed to a bug from hosteling, and a lifelong love of cycling. Chuck had to ride to Boston for bike parts, and it was in Boston that he became friends with Charlie Hamburg, a Harvard professor who also happened to import the fine French touring bikes by Rene Herse. One wonders how many current Harvard professors can make the same claim. Is there a number lower than zero? Charlie taught Chuck about derailleurs and bikes in general, but he couldn't provide

Chuck's drivetrain. Enough to scare off any thief, and certainly to thwart his getaway effort if the bike were parked in the top gear. Shown in the "no-no" big ring x big rear cog combination, to prove that—we'll, to be honest, we're not sure why, but if I/Grant were riding a 64t big ring, I imagine I'd spend some time in the big rear cog, as well, even if it was, as this one is, a 42t. This is a 41-inch gear.

Chuck's top gear is 133-inches; his low gear is 15.4 inches.



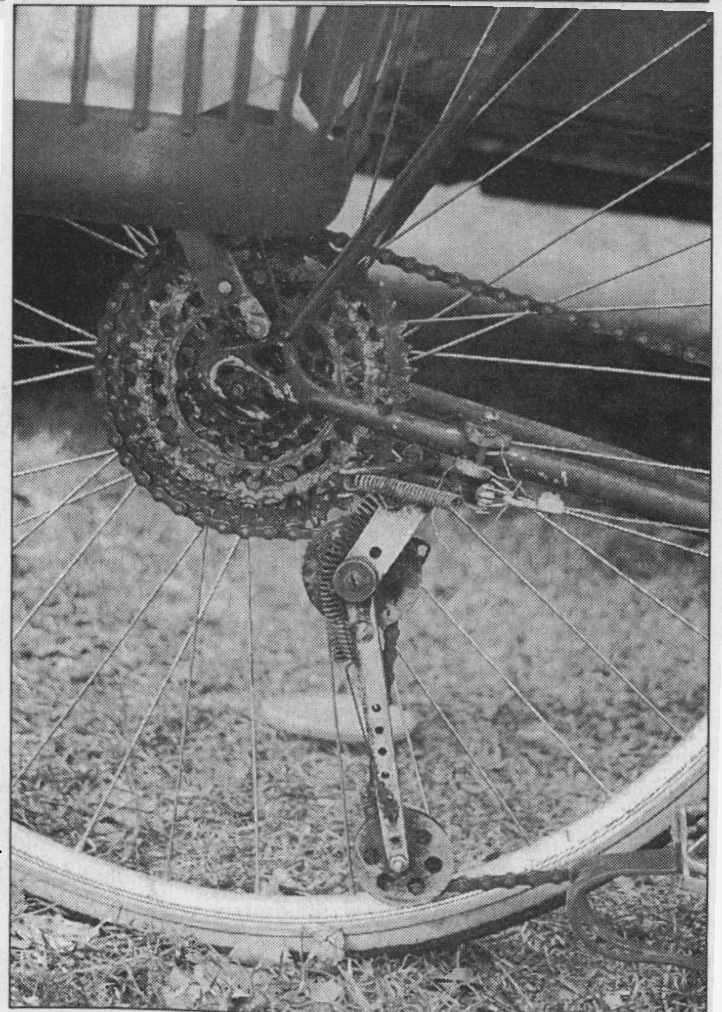
Chuck with a derailleur that met his needs, odd as they may have been.

So Chuck was inspired to build his own. Sheldon Brown wrote an earlier story in the RR about Chuck's first American rear derailleur, but some of the facts bear repeating in any story about Chuck and his bikes, and this is such a story.

Chuck got the inspiration for his derailleur by seeing, in a French cycling magazine, an early Nivex rear derailleur. He noticed what he perceived as deficiencies in the way the cage moved, and it's vulnerability in a crash. His response was to construct a derailleur out of wire, largely, and one that would have the gearing and chain wrap capabilities theretofore unheard of in rear derailleurs. Also, he created an open design that makes it easy to remove the chain without disassembly. It has a few other features that even modern derailleurs lack, including a floating lower pulley, which always directs the chain toward the active chainwheel.

Chuck built his prototype out of parts he bought at a local hardware store, and he's built 60 or more since, with only minor modifications.

Chuck's rear derailleur, which mounts to the chainstay. That gives the chain more contact with the rear cogs, which theoretically reduces wear on the drivetrain. But where else would he have put it? It was probably easier to make a chainstay clamp than a derailleur tab mount, and he cut off the derailleur tab, anyway.

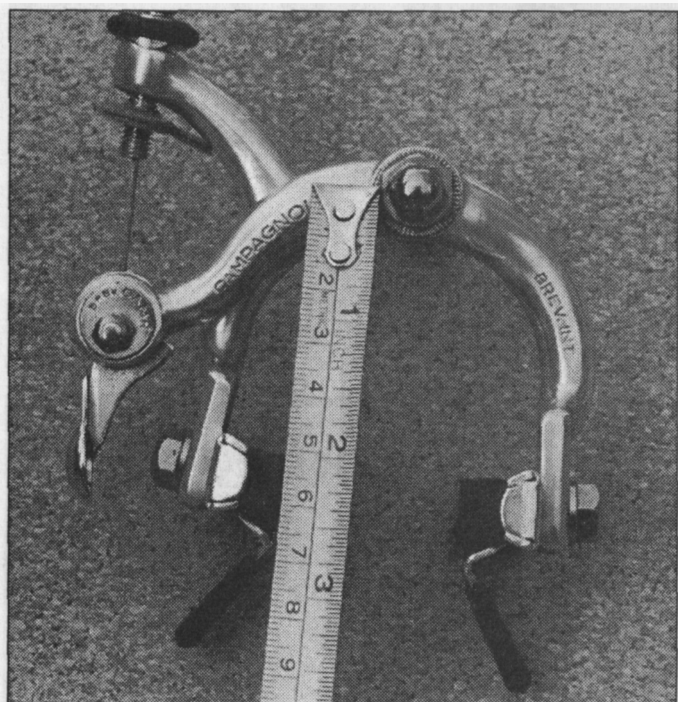




KNOW ABOUT SIDEPULL BRAKES



We constantly think about and often talk and write about brake reach. It is a topic that permeates every fiber of our being these days. It courses through our veins, and we dream about it. It affects frame and bike design. It is ignored by the manufacturers who know better, ignored by the media who ought to know better, and is largely unknown by 99 percent of the cyclists who started riding bikes after about 1980. We've been frustrated by the lack of a top-end standard reach brake, but the shortage has made our frames better, because it has forced us to maximize clearance with a short reach brake. There is a small chance that in 2002, there will be a good, high-end, fender-friendly dual pivot brake.



Standard Reach

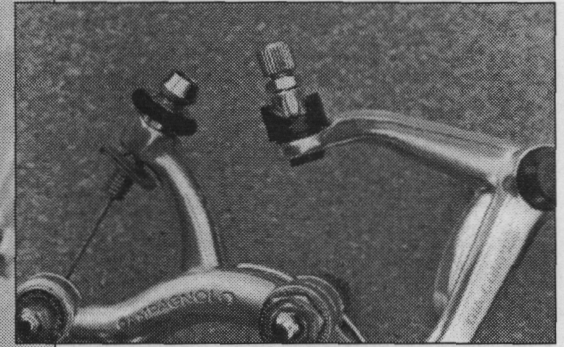
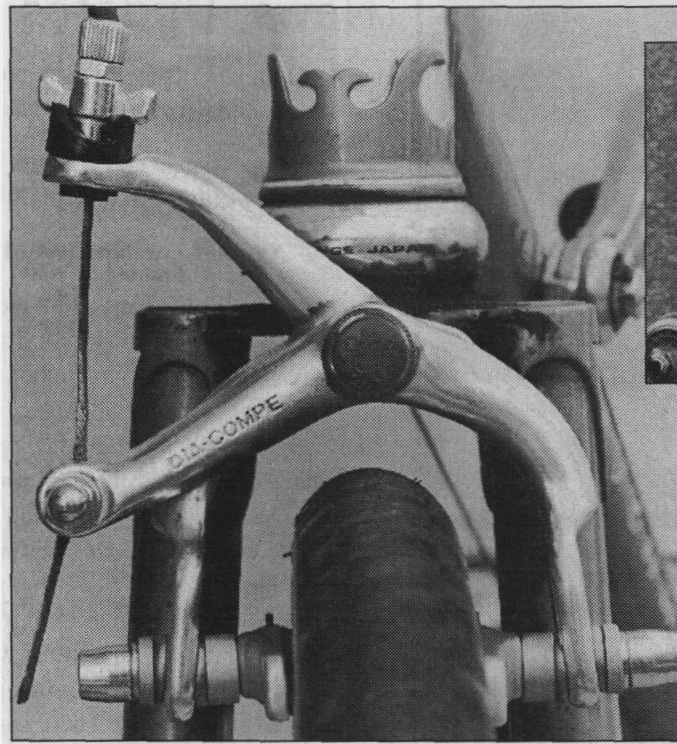
Most good brakes used to be made in both standard reach and short reach. The brake above is a Campagnolo Nuovo Record standard reach sidepull, and as you can see, it reaches down 56mm from the centerbolt. At the highest point in the vertical adjustment slot, the reach is 47. When you design and build a frame, you do it for a specific brake reach. A standard reach brake allows the designer to make it for anywhere between 47mm and 56mm. Taking full advantage of the maximum reach of any brake is a bit of a manufacturing risk, because if you don't hold your tolerances, the brake shoes might rub on the tire, and that's no good. So most bike makers shoot for a middle-of-the-slot placement. In a standard reach brake, that would put the shoes at about 52mm down—still far enough away from the centerbolt to provide room for fenders and chubby tires. When we build a frame around standard reach brakes, we hit 56mm everytime, maximizing clearance.



Short Reach

This brake, an upper-end Dia-Compe from the early '90s, is a short reach brake, with a maximum reach of 49mm. The top-end is just 39mm, which is sort of like making adult shoes in sizes ranging from 3 to 8 1/2. What determines the location of the brakes in the vertical slots? The length of the fork blades, and the height of the rear brake bridge relative to the rear dropouts. If the fork blades are short or the bridge is low, then you might find your pads need to be in the center of the slot. In the case of a short-reach brake (remember, 39-49mm reach), that puts the shoes about 44mm below the centerbolt, and that doesn't leave room for much more than a skinny tire. Forget about a fender. And, most builders shoot for a mid-slot placement, because it is forgiving. If they're off a bit one way or another, the braking surface will still end up in the workable range, and nobody will know the difference. On Rivendells and Heron road frames, we aim for a 48mm placement (some brakes come down only to 48). This maximizes the space above the tire, and makes fenders possible even with short reach brakes.

The humble Dia-Compe 505Q. Put on some nicer brake shoes and centerbolt nut, and don't hang out with snobs. This brake offers more performance and design smarts per dollar than any other sidepull out there. It is not a winner in the finish and details department, but it is the perfect interim brake until something fancier comes along.



Above Left: Campy Nuovo Record brake has a better barrel adjuster, and a quick-release on the lower arm. Right: The 505Q's q/r and barrel adjuster are crummier (still fine) and on the upper arm.

A Current, Rare, Super-Inexpensive Standard Reach Sidepull: The Dia-Compe 505Q

I was paging through a not-widely circulated Dia-Tech brake flyer and came upon a cheap standard reach sidepull. By "cheap," I mean it lacks certain features and the finish we've come to associate with high quality. Moreover, it has a couple of features that we generally associate with low quality; or at least low price. I ordered a set anyway, thinking I'd probably donate them somewhere or put them into a box and forget about them for decades. Instead, I'm in love!

First, the bad.:

1. There's no micro-adjusting quick-release on the lower caliper arm, but Campys don't have this anymore, either.
2. The finish isn't pro-quality, but it's not bad.
3. The black cover over the nut on the centerbolt, and the chunky black brake shoes.
4. One of the bushings is plastic, instead of, you know, oil-impregnated bronze.

Now the good:

1. The micro-adjusting and opening-closing quick releases, all on the upper caliper arm, work great and are easy to use.
2. You can replace the black nut-cover with a stainless nut

that doesn't need covering, or a nice acorn nut, like on a good brake. In other words, you can spiff them up yourself for less than \$2. Many bike shops have nuts just for this, and a good hardware store will have something that looks better. The brake shoes are even easier to replace, and you have to replace brake shoes in any brake sometime.

3. It's light. Light isn't God, but so long as lightness doesn't come at the expense of reliability or long life, there's nothing wrong with it.
4. They feel great. I promise you, they feel every bit as solid as my Campys. They're not a light-action dual-pivot superbrake, but they feel as good as a Nuovo Record. They aren't finished as well, they do n't have the finery in the details, but we're talking about a \$20 set of brake calipers (front and rear, total). A new old-stock set of Campys will cost you \$200 or so, if you can find them.
5. They work great. They have the solid thunk-then-stiffness feel of a good sidepull. I put some fancier pads on mine so they don't look as cheap, and I'll replace the centerbolt nut with something better, and then...I'll wait patiently until Shimano or Campy introduces a fancy standard reacher. This isn't an ad, it's good news. But we do have them. They're the last item listed in the Flyer.
Part No. 15-081. \$20/pair.



The Roundest Tire In The World.

Probably, the Universe

Panaracer, who makes the Roll-y Pol-y for us, said if we wanted it to be extra round, it would require a three-part mold. Apparently with a two-parter, there's always a bit of a bump in the middle. So three it was, and that's how the Roll-y Pol-y came to be so round.

WHY IS ROUND IMPORTANT? Because if the tire is round, it leans predictably. There's no feeling of sudden steepness as you transition from 12:30 to 2:00. That would be your sharp right-hand turn.

THE ROLL-Y POL-Y IS THE REST-CORNERING TIRE WE'VE RIDDEN, and the roundness is the main reason. There are other good things about it, but when you think of Roll-y Pol-y, think of roundness and leanability.

SAFE, FAST CORNERING REQUIRES judgment and good technique. But once you've got those, all you need is a couple of super-round Roll-y Pol-y's, the best-cornering road tires in the world.

Rivendell Bicycle Works
Box 5289
Walnut Creek, CA 94596
ph: 1 (925) 933-7304
fax 1 (UPS) COW-LUGS

www.rivendellbicycles.com

News, Updates, and Notes

In the catalogue no. 7, the part numbers for the Carradice Lowsaddle Longflap and Nelson Longflap are reversed. The correct numbers are:

Lowsaddle Longflap: 20-009

Nelson Longflap: 20-010

Carradice's saddle bag sewer recently retired. Yes, there was one guy who did them all. They're tricky to sew, and not just anybody can do them, but this is a small temporary problem that Carradice will solve. Until then, there may be shortages. Carradice is introducing some new models, and we'll have some test samples before you read this but after this goes to print.. By late Spring '01 we should have the **Atlantis in both a 47cm/26-inch wheel and 68/700c** wheel version. The 47cm is because that's the size Grant's daughter will need by then, and the 68cm because of Bhima. We'll put updates in the RR and on the web, but that's all there is for now... **Heron prices are going up** at the end of this year, probably to about \$1000. There may be a new color or two, it hasn't been decided yet. Check Heronbicycles.com for the latest... **Well, we never did get the TA Zephyr crank.** TA made 550 of them and rather than spreading them out, they sent them all to **St. John's Street Cycles**, in England. They have a website, look them up. We hope to have them again, we think we will, but French stuff is always a pain.. **Brown cloth bar tape?** We have a promise for it, by Spring '01. After that, grey. Velox, tapemakers, was sold last year and the new owner, a fellow named Serge, wants to do good things... **Tim Rutledge** of Seattle Bicycle Supply, and a well-known and accomplished cyclo-cross racer, has designed a new and wonderful cantilever brake, dubbed the **Radius**. They're available now in black and red, but we should have the silvers soon. Check the website, and maybe we'll do a mailing... We are out of the existing road crown, and will do a **new road crown** to sort of match our new lugs. It is hobbling road frame construction right now, but we should have the crowns by December 25. We actually got samples, but they were a little backwards in one area, so we sort of had to start over... we've paid off \$40,000 in credit card debt since mid-July, and are starting to hack away at our \$50K line of credit... The **Roll-y Pol-y** tires are doing well, and this spring we'll introduce a nearly identical one with superthick tread for lousy surfaces, tandems, and commuting. It will be the **Roughy Toughy**, or maybe Ruffy Tuffy. Same casing, but with 2.5mm thick tread and perhaps a kevlar belt beneath it.

— Grant

LETTERS

FRAME SIZING, BIT SIZING & BLANKETS

I'm writing to tell you about my secret Rule of Thumb for frame sizing. I arrived at it while working at the local pro road shop, and sizing up countless riders, both male and female. Here's what I do. It sounds crude, but works: Convert the rider's height in feet and inches to a number, then subtract two. For instance, the number for a rider who is 5 feet 8 inches tall is 58. Subtract two, and you get the right frame size: 56cm (measured from the center of the bottom bracket to the top of the seat tube, the way everybody but the Italians do it). A rider who is 5 feet 6 inches would ride a 54cm frame, because $5'6" = 56$, and $56 \text{ minus } 2 \text{ is } 54$.

This works astoundingly well up to a rider height of 6 feet. At that height, I subtract zero. Above 6 feet, I add a centimeter or two. Try it for yourself and see how close it is.

Since we didn't sell many really tall road bikes, I'm not clear on how it works for really tall riders. Also, it doesn't work with long-legged women, either. But if you're not either of those, it works.

Now, here's another sizing Rule I'm working on. To determine the proper bit size (width) for your horse, measure the width of his front feet. They should match. They do for my two horses, even though one is much larger than the other.

Can you use a lead on a classic-styled wool blanket? These are Navy blue, with a 2-inch orange border woven in, and measure large enough for a queen bed. This is the 1851 US saddle blanket, meant to be folded 6 layers thick, so that every day for 12 days you can put a fresh layer next to your horse. It doesn't say US in the center, though. This is a very soft and comfortable all-wool blanket, just \$59 from Border States Leatherworks (www.borderstates.com). Also offered here is an infantry-style blanket, gray with black stripe at each end, for \$50.

—Jeff Matthews

Jeff, good tip, and it works for me. Readers: Try it. When sizing a frame, throw all the formulas you can at it (or let us do it for you, in the case of a Rivendell-Atlantis-Heron). This way works, though. Other ways (for road bikes only): (all numbers in cm)

- a) Pubic Bone height minus 25 to 27.
- b) Saddle height minus 10 to 10.5
- c) Pubic Bone height minus 0.880, minus 10 to 10.5.

A GOOD BRANDT RANDT

As I go to my bicycle shop I have a hard time finding good rims (no more MA-2) tires (mainly colored tread 23mm cross section), clothing that isn't so garish and temporary that it's worth washing, quite aside from

being body fitting (knit material is out). Nearly all wheels are welded, machined, and hard anodized, three features that double the cost of a rim with no advantage to the user, the machining being done only to prevent brake squeal on new bicycles. IO-speed clusters as though more gears will flatten mountains at the cost of reasonable flange spacing and a raft of other gratuitous expensive gimmicks that replace durable equipment that is no longer offered.

All that is bad enough but bicycle frames are getting smaller and smaller with huge seat posts and inappropriate dimensioned tubes that intersect at odd places. What frame builders seem to have missed is that the frame is actually a type of spring and that steel is a durable spring, unaware that the ancients suffered fatalities from fork failures. These occurred because the fork crown to steer tube junction was the weakest part of the frame and a fork failure at the crown is an automatic dive into the pavement head first. There is hardly a way to prevent it as the front end of the bicycle goes down without warning.

To avoid this problem, bicycle frames have been built for many years with reinforced steer tubes and durable fork crowns that resist sudden failure because they are stronger than the fork blades that rarely break at the same time. I can vouch for that from two such failures and they are benign. As most of us have learned in years past, a frontal collision bends the frame top and down tube on the classic steel frame. This is not accidental but intended. It also reveals where the highest stress is.

Today, frames with enormous down tubes, that will never bend first, are common as are forks that don't have a fork crown but rather a welded junction between fork blades and steer tube.

Alas, we have returned to the days of yore where the fork was the weakest link. I am glad I am not riding one of these bicycles. What I find disheartening is that there is no one to whom the bicycle manufacturers will listen. I certainly cannot convince them of anything. Possibly someone who has spent much time measuring and documenting these structural conditions can. I have found that explaining how and why something works does not convince people, even if you cite common every day examples of the outcome. My analysis of these things and recognizing the problem does little good because I am not a frame builder, or for that matter a wheel builder, and as such cannot sway such folks. I have talked at length with the makers of these products, whether it be Chris King, Gary Fisher, Tom Ritchey, Marko Zingg of DT, Shimano engineers, or any others.

The work I have done on bicycle wheels is recognized by few in this industry, most of whom do not believe any of it. That fairly characterizes my experience of technology in bicycling. I work in an industry where analytical

work and insightful discoveries are appreciated. I find it discouraging that the bicycle is in the hands of people who find marketing ploys more important than sound technical advances.

—Jobst Brandt

Jobst is a cyclist, engineer, and a frequent contributor to the internet's Hardcore Bicycle Science (HBS) group (started by Sheldon Brown). He has co-designed and developed many bicycle components and accessories, most notably Avocet's slick tires and computers; and Tom Ritchey once said, "Jobst is the only guy I listen to."—GP

THE GAS STATION KID WHO LOVES CANNONDALES

On June 24, 2000, the BC Randonneurs sponsored the 2000K in Y2K brevet. The randonnee was organized in response to the challenge issued by Randonneurs Mondiaux at their general meeting following Paris-Brest-Paris last year. I believe there have been at least four such brevets held world-wide this year to commemorate the end of the second millennium. Our ride was lead by Real Prefontaine, who is also the current president of Randonneurs Mondiaux. The route generally followed the historic Yellowhead Highway on an out-and-back course. We started and ended in Abbotsford, BC, with a turn-around point just outside Prince George, BC.

Seven riders started and six riders finished the brevet. Normally, I wouldn't expect this to be of much interest to you, but three of the six finishers rode Rivendells. The three Rivendell Riders were Michel Richard, Dave Johnson, and myself. We took a picture of the three of us with our bikes at the start of the last leg. I'll send you a copy if I can get my hands on one. Also, five of the six finishers used Carradice bags to carry all the essentials needed for minimally supported riding. Four of the six rode on Brooks saddles.

2000 Kilometers converts into 1250 miles. The rules governing the brevet allow a maximum of 166.5 hours to complete the prescribed course. The format provided six checkpoints for sleeping, support and regrouping. These checkpoints were at a hostel, a bed and breakfast, or a motel. Thankfully, it was not necessary to carry tents, sleeping bags, cooking utensils or other camping gear. A common support vehicle carried one bag of clean clothes and provisions for each rider. We ate most of our meals at convenience stores or cafes. The result was a lot like credit card touring, but averaging 200 miles per day for a week. You can read a more detailed account of the ride written by Real Prefontaine at <http://www3.telus.net/randonews/y2000n5/y2000n5real.ht>.

The longest day was 390 kilometers (about 250 miles). The shortest day was 160 kilometers (about 100 miles). A typical day was about 325 kilometers (a little over 200 miles). With stops for food and water (you'd be surprised at how much you need to eat and drink), and (how

can I put this delicately?) other bodily functions, I was riding between 10 and 23 consecutive hours. A typical day involved about 18 hours on the Brooks B-17, and only 4 hours of sleep. That's more fun than most people care to have.

On the second day, there was an incident I know you will find amusing. We three Rivendell Riders were riding together and stopped at a gas station in a place called Avola. Actually, the gas station was the place called Avola: nothing else was there. The kid working at the station knew a thing or two about bicycles. He noticed the lugs and the conservative paint jobs. He was sure all three bikes were at least, what, 25 years old? He couldn't believe mine was just four years old, Dave's was a year old, and Michel's is new this year. Of course, he also quite talking to us when Manfred Kuchenmuller pulled in on his seven year old Cannondale. So, you see, it pays to advertise.

To cover those kinds of distances, I need a bike that is comfortable, versatile and durable. I need a bike that has stable and predictable handling characteristics. I bought my Rivendell because you promised me it would be such a bike. I'd have to say it has lived up to the promise. And you made me promise that I would ride the bike, not treat it as a show-piece. I'd say I've lived up to that promise, too. In addition to the 2000K, I've completed the Rocky Mountain 1200K twice, Paris-Brest-Paris, and several 200, 300, 400 and 600 km brevets. Not to mention countless club and training rides. In another week, I'll make my fourth attempt at the Rocky Mountain 1200K (I completed it twice, but dropped out with knee pain in 1997). The Rivendell is what Harold Bridge (you remember Harold from RRI I, don't you?) calls "a proper randonneuring bicycle." —Ron Himschoot

NOT INTO ZIP TIES, INTO CHAINSAW OIL

our article on toe clips and straps was interesting. I gave up straps years ago. I like to jump on my bikes in whatever I happen to be wearing. I use plastic Zefal mountain bike clips, which do not even accept straps, and MKS alloy quill pedals, which I fill with chain saw oil, give adequate support on the steep hills here. I need the granny ring just to fetch the morning paper.

I read your magazine courtesy of one of your customers in St. Davids. I admire your frames, but your suggestion to mount mudguards using zip ties do you no credit. I ride an old Mercian with lugs you would die for, and an equally ancient Gillott, both severely updated. And of course I use Carradice bags! —John Way (England)

We're often called to the mat on our preference for attaching fenders with zip ties (drill holes in the fenders to use as lash points). It seems inconsistent with our approach to everything else. But beneath our superficial highbrowness lies a practical streak born of frustration with other fender-attaching methods, especially with the manufacturer's suggested ways. Zip ties makes it so easy, and lets you pull the fender further away from the tire, something that's useful to do on close-clearance frames (or allows you to use a bigger tire than a traditional bolt-and-nut mounting method does). Stylewise, I think it loses some points, but one needs only to have had

half a dozen bad or frustrating experiences with real metal hardware, to convert once and for all. As a general comment on fender-mounting, now that we're headed into fender season (apologies to our Australian customers, go Thorpy!), the L-brackets that come on fenders were designed to work with bikes with relatively huge amounts of tire/fender clearance, such as your old, fine Mercian, which has either centerpull brakes or standard reachsidepulls (which have lots of clearance). But John, if you go to mount the fender on a modern road bike, using that L-thing, you'll see that the vertical mounting/adjustment slot in it does not allow you to push the fender high enough, away from the tire. So the thing to do is rip it off with some vise grips, ignore the hole you leave, and drill two holes fore and two aft of the fork crown and rear brake bridge, and use zip ties to attach them and snug them up high and tight and away from the tire. —GP

LUGGAGE

I fully understand the theory of low weight distribution & that pannier bags achieve this by putting the weight longside the back wheel, not above as with a saddlebag. But, unless one is carrying a world tour amount of camping equipment the weight of a packed saddlebag is far less than the possible weight variation of the rider.

If it is critical to bike handling to have a pair of panniers rather than a saddlebag then it suggests the heavily built rider is not as safe as his or her slim companion.

My Father's generation, & mine to a lesser degree, were not wealthy enough to own a stable of bicycles, 2 at the most. You couldn't keep more than that in the front hall anyway! That classy gem of the cycle industry; the British Clubmans Hand-Built Lightweight (Hetchins is a prime example) was intended, with suitable wheels, for road racing as time trialing was known in the days when bunched racing was not allowed. The normal routine on a racing weekend was to carry the racing wheels (sprints & tubulars or isew-ups) on carriers clamped on the front wheel spindle & carry the clothing in a bag hanging from the saddle. There might be a clip on carrier to prevent the bag from breaking the rear mudguard (fender).

It would be considered a sin to put anything as utilitarian as a rack on a decent bike. (But of course, North Americans are rather gauche in such matters; although "practical" is an alternate description). In any case when one arrived at the event the less to remove from the bike the better. Three straps to undo to remove the bag, a nut on the front brake bolt held the mudguard on & 2 wing nuts held the stays to the forks. The rear mudguard clipped onto the seat stay bridge. Change the wheels or, if racing on the same wheels that were ridden to the event, turn the rear wheel round for a bigger gear more suited to racing. A double sided rear hub with 2 fixed sprockets, an 18 or 19 on one side and a 15 or 16 on the other. Getting the bike ready for the race took about 5 minutes.

It was the norm for us to use a bike for any & all purposes. The wheels & or tyres & the gearing maybe changed but it remained fundamentally the same bike. I had, in 1954, a custom bike built to my own spec that I

raced at all distances from 10 miles to 400+ in 24 hour time trials with a certain amount of success. It was also used for Alpine tours, rough stuff in remote parts of Britain & on the gravel roads in mid sixties Quebec & New England. I finally disposed of it 3 or 4 years ago due to the rusted out bottom bracket.

I have just returned from a month in UK & France. I had hoped to use my Carradice Long Flap Camper saddle bag. But as the vacation had other purposes than just cycling there was just too much to carry. As a result I had to insult my custom built Mariposa by adding a rear rack. Frankly, I couldn't tell the difference in handling between using a saddlebag & using panniers. I do know I can never remember which pannier has got what in it & I usually go to the wrong one. Admittedly, with the rack & panniers as well as a 'six-pack' bag I was able on occasions to leave the panniers behind & travel with just the latter.

Two years ago I did the first half of an "End to End (Land's End to John-O-Groats) I used four panniers then, the front ones on low rider racks. I found 25% grades in Devon to be downright scary. I don't remember any problem like that when using a saddlebag. The bulk of the saddlebag is hidden behind the rider & in effect becomes part of the rider. Panniers are an increase in frontal area. —Harold Bridge

ed note: Harold is one of our most experienced and smartest members, and I always learn from him. —Gp

MARC AND FENDERS

I have heard that Waterford's Marc Mueller was a Fender fanatic before, it was a surprise to see his Strat article in RR 20. I go back a way with those, having played bass pretty well and guitar really badly since my teens and owned a few Fenders—have kicked myself as hard for selling off my paisleyed Telecaster Bass as for ditching any bike. Had never heard that the company was on the verge of discontinuing the Strat in the late 60's, but have heard an interesting reason for the quality of early product. Fender is and always was in Fullerton, Orange County. Southern California was at the time chock-full of defense contractors of the aeronautical and electronic variety. For the first dozen-plus years of Fender manufacture, the story goes, their pickup magnets, tone and volume pots, and all wire, connectors, etc., were surplus purchased from these companies; all the innards of early Fender instruments were military and NASA spec materials as there were no pre-made guitar parts at the time, sort of like the difference between jewel-like investment cast Taiwanese lugs and stamped stuff made out of recycled Renaults!

It really is an instrument that was frozen in a half-developed state. Probably the appealing variety of tones that come out of it wouldn't have been possible—the Robert Cray/Mark Knopfler springy-kind of tone originally started by players getting the three-position pickup selection switch stuck between two settings. Anyway, great story and it will probably flush out all the closet guitar nerds in RR membership. —David Feldman

This Ad Will Self-Destruct

by Maynard Hershon

Every year or so, I get mad at advertising, how it's everywhere, how susceptible we are to it — how well it WORKS. I participate in advertising myself, writing occasional magazine ad copy or bicycle company brochures. It's fun.

The ads I write, print and brochure ads, announce themselves as ads. You know you're looking at an ad when you read one of them. They sell exactly what they say they sell, the product the copy is written about. There's no hidden message or suggestion or manipulation.

If you are convinced somehow to investigate a product by something I've written, you probably trusted my "voice." Or you saw something in the product you liked, some aspect of it that I brought to your attention.

I had nothing up my sleeves. Everything was on the surface. Ads like those, like the ones I work on, don't set me off.

What does set me off? This time it was a newspaper article about the new remake of the old movie Shaft.

In the early-'70s Shaft, star Richard Roundtree wore leather jackets and turtle-necks. That look influenced men's clothing-buying habits for years. During the filming, the paper said, wardrobe people changed Roundtree's outfits six times.

In the new movie, Samuel L. Jackson plays a guy named Shaft, hush your mouth, but not the same Shaft. This time he's a cop and a nephew of the original character.

In the new movie, the paper says, Jackson has 65 costume changes. In the spirit of the old movie, there are leather jackets and turtle-necks, all Armani, all designed for the movie.

Head-to-toe Armani? Figure, what, \$10,000 per outfit? Sixty-five outfits. I'm talkin' 'bout Shaft, the new Shaft, an honest cop with two-thirds of a million dollars worth of clothes...

Many of us will see the movie; Jackson's onscreen look will linger in our minds. We admire Jackson, we'll admire Shaft; Some of us will buy Shaftlike clothes, Armani clothes, based on those positive feelings.

We will not feel that we've been seduced by advertising. After all, we ignore Armani ads in magazines. We may never open the upscale magazines that display the ads. We feel immune to attempts to convince us, subtly or overtly, to buy some outfit's widgets.

The Armani clothing so visible in Shaft is surely an ad, bought and richly paid for, but it's not an ad that introduces itself as such. It's product placement, advertising that catches us with our guards down.

It's Tom Cruz riding a Triumph motorcycle and throwing away exploding Oakley sunglasses. It's Pierce Brosnan driving a BMW

sports car and repeatedly checking his fancy Swiss chronometer. It's some star flashing a cigarette pack so we can see the label, and ordering scotch whiskey by brand. We soak that stuff up.

We see Shaft's outfits. We imagine that the movie's wardrobe people chose them after studying the cool Shaft character, so the clothing would reflect what the wardrobe person imagined as Shaft's taste.

We see the movie and decide the costumer was right:

A guy as cool as Shaft would wear just those clothes. Cool guy clothes. Armani clothes.

We don't think about guys in smoke-filled rooms bating out deals for product placement, making sure we come away from the film convinced that cool, street-smart, pistol-whippin' guys wear Armani.

We sneer at ads but we're sponges for subliminal advertising.

Colnago pays the Mapei team, strongest team in the world, to ride Colnago bicycles. The Mapei guys make those bicycles abundantly visible in magazine photos, in videos and on TV.

We tend not to think of that visibility as an ad, unless (as ad people do) we think of bicycles as rolling billboards.

We imagine that the Mapeis chose those Colnagos over all other bikes. Then we see them doing well on them in the world's toughest races. We conclude that cyclists as demanding as they are would select just those bikes.

We are encouraged to think that Shaft could not approach his level of coolness in Gap khakis, and that the best team in cycling would go far slower on lesser bikes.

We don't REALLY believe those things. After all, we're sophisticated people. We know neither of those things is true. Truly cool people can wear any damn thing without loss of cool. The stars on the Mapei team would be just as smokin' fast on OUR bikes, yours and mine.

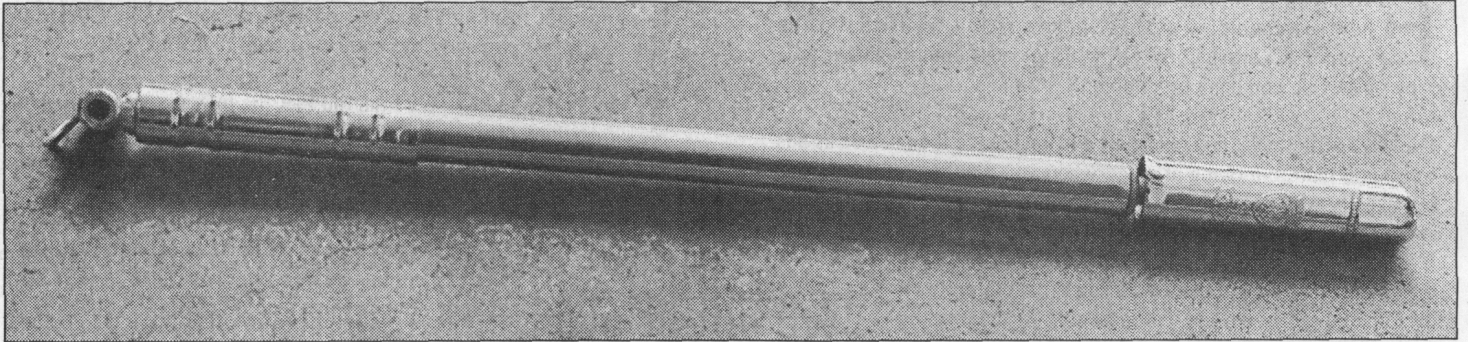
But product placements are aimed at savvy people. Look at the products: You have to be savvy to be a prospective Armani buyer, and you have to be savvy to consider purchasing a Colnago road bike. You have to be doing all right.

We pretend we're so sophisticated we can see right through product placement "advertising." Why, then, do the ultra-savvy people at Armani or Colnago or their ad agencies bother?

Because, smart as we are, we fall for it anyway. We're thinking about knee-length Armani jackets and Mapei-replica Colnagos right now. Am I right?

**We sneer at
ads but we're
sponges for
subliminal
advertising.**

Two Frame Pumps Silca Impero and Zefal HPX



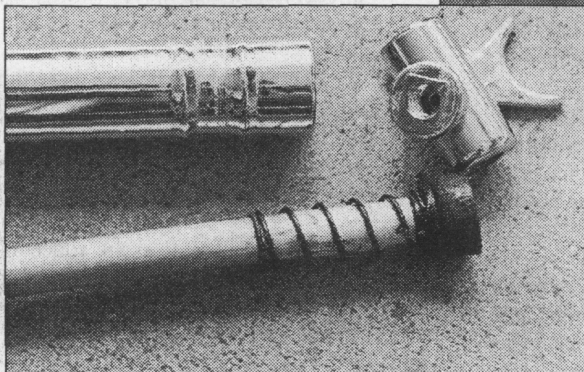
This is the best-looking pump in the world, if not the solar system. It's chrome-plated plastic, which on the surface is nothing to rejoice about, but it's all one color, the color goes with all frame colors, and...that's about it.

Silca is the brand, Impero is the model. Thirty years ago this is the pump everybody who had a good bike had. It had a light aluminum barrel. It worked well. It came in eight colors, plus chrome. You could replace the guts if anything happened to them. Just as important, Campagnolo made both plastic and steel heads for it, so you could class up your bike even more with a Campy-headed Silca.

The current Imperos are almost the same as the early ones. The aluminum is now plastic, so it's not as hyena-worthy as it once was. A few minor details here and there are different, but if you could take this one back to 1972, you could sell them on a street corner and nobody would burn you at the stake for being a witch from the future. In 1572, though, a different story.

If someone were to do an objective test of ten frame pumps, it's a pretty good bet that the Impero would lose. Since it was one time the best, all subsequent pumps have used it as a standard and improved upon it.

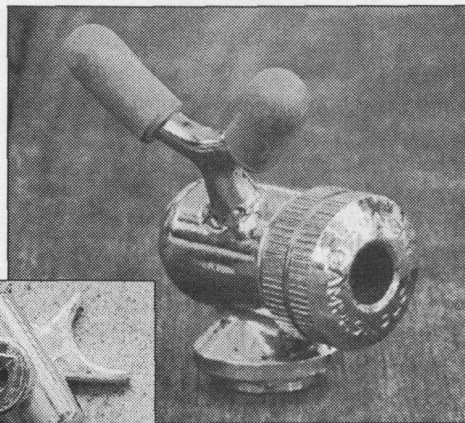
What I like about this pump, is that it looks good, weighs little, and works fine. I've probably pumped up 400 flat, at 55 to 60 strokes per inflation, with Imperos. I think they crap out after about 80 tires, but that's enough. You don't use a pump a whole lot. Most of the time it's just there. The Impero works when necessary, and looks good the rest of the time.



These parts are still available. The plunger head, a piece of leather, needs a rub of oil every four years. It soaks up the oil, gets fatter, and seals tighter in the barrel.

I've broken only one. That was when I Debashis flatted and didn't have a pump, so I let him use mine, and he broke it. Not a big deal—it was 6 years old, and the replacement was cheap.

The sizes are the smallest compressed lengths. To determine your pump size, measure the space between, the back of the head tube and the seat tube. Most mid-sized frames end up with a 51cm Silca pump.



Campagnolo's steel pump head for the Silca Impero. Long discontinued. If you have lots of time and a little money, you could remanufacture something like this and sell at least a thousand of them. It's not a living, but it would make a thousand people happy.

We've had Silcas for 5 years now and never put them in the catalogue. They're \$20 each. If you want one, here are the part numbers:

- 28-001 for inside to inside gaps from 39cm to 42cm
- 28-002 for inside to inside gaps from 43cm to 46cm
- 28-003 for inside to inside gaps from 47cm to 50cm
- 28-004 for inside to inside gaps from 51cm to 54cm
- 28-005 for inside to inside gaps from 55cm to 58cm



Classic Pump II: The Zefal HPX

This pump was born in 1973, and I've used them here and there, and many of my friends have them,, and I've read pump reviews about them, and it's safe to say that if you were to pump truth serum into the presidents of all other pump companies and then ask them which pump they'd take on a 10-year, incognito, solo world tour, no cameras allowed, this would be the one. It's French (*Zefal* translates to *the fal*) but looks German; by which I mean it's black and has lots of plastic on it, but it's still heavy. The barrel is aluminum. At about 9 ounces, it's 4 ounces or so heavier than a Silca Impero, but it's as tough as a frame pump gets. You get it, you use and abuse it year after year, and it keeps working. Old HPXs lose their paint, get dinged up, and still keep working. If they made it chrome-like or at least satin silver (like they used to), and got rid of all the black, then they'd really have something.

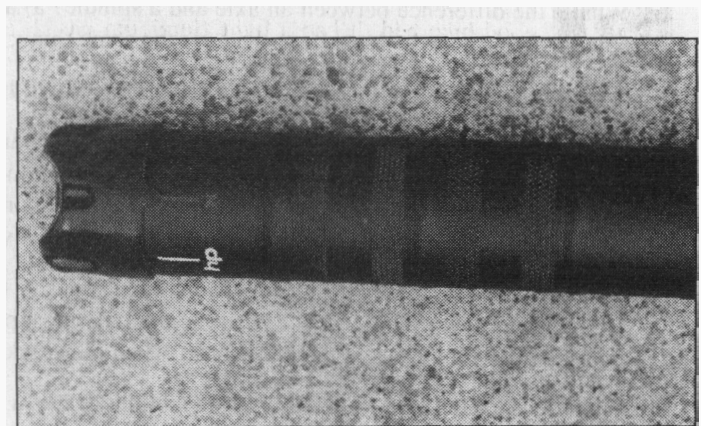
In hard core tests performed by cyclo-scientist-journalists, the Zefal always creams the Silca.

The HPX has a valve lock, meaning you push it on over the valve, flip a lever, and then it won't come off. It's one of those features that seems logical but the right way to pump is to hook your thumb over the top of the tire, applying pressure to keep it on. It's the most natural way to hold the pump, anyway, and once you get used to it, it's hard to pump a tire without doing it, even if the pump head has a valve lock. Valve locks encourage bad technique, but maybe they help on really fat tires. Anyway, if Zefal needs the valve lock feature to help keep the pump alive and marketable, I'm all for it.

The HP and X refer to two different modes, which you select by turning the handle. When you dial it in to HP ("high pressure,") you disengage a spring inside the pump. The spring is what lets it stay on your frame when you're riding around, but you don't necessarily want to fight the spring when you're pumping air, and the

HP mode frees you of that. Then, when you're finished inflating your bum tube, turn the handle to X mode to engage the spring and let you store the pump on your bike. All you have to remember is HP=pump mode, X=storage mode.

We've started carrying this pump, as it's the most reliable touring pump. For part numbers etc, see the flyer.



Here's the handle. You can dial the pump to HP ("hey, pump!" mode, or to X for storing it on your bike. It wo n't stay on your bike in HP mode, and it's harder to pump in X mode.



The business end showing the extreme blackness and the valve lock feature, necessary for mass market appeal.

Pop Quiz

name:

General Bicycle and Equipment and Trivia Knowledge. No need to submit it, but okay to, we'll read it.

1. Frame size is usually measured from
 - a) Center of bottom bracket to top of the seat tube; b) Ground to top of the top tube; c) Center of bottom bracket, straight up, to top of the top tube; d) Center of bottom bracket to centerline of the top and head tubes
2. Wheelbase is the distance between: a) the front and rear hubs; b) the rear of the back wheel and the front of the front wheel; c) other (specify)
3. Handlebar width in a drop bar is measured from: a) The center of the left open end of the bar to the center of the right open end; b) The center of the curves (one curve to the other); c) Inside-to-inside at the bar ends; d) Outside-to-outside at the bar ends.
4. Which of the following chainring combinations is typical of a Half-Step + Granny set up: a) 48 x 38 x 24; b) 53 x 42 x 30; c) 48 x 44 x 24; d) 48 x 42 x 24
5. Which of the following components is the rarest these days: a) A Half-step compatible front derailleur; b) a standard reach sidepull brake; c) A suspension fork with a foot of travel; d) A leather saddle.
6. Which gear is hardest to pedal: a) 46 x 12; b) 50 x 13; c) 53 x 14; d) 44 x 11
7. What's the difference between an axle and a spindle? a) an axle uses contact bearings; and spindle uses ball bearings; b) an spindle spins, an axle doesn't; c) they are the same thing; d) an axle connects lever arms of some sort, a spindle does not.
8. Which maker does not belong in this list: a) Phil Wood; b) Bullseye; c) Campagnolo; d) Chris King; d) American Classic.
9. What is "front-center" on a bicycle or frame? a) the distance from the center of the bottom bracket to the nearest point of the front wheel; b) the distance from the center of the bottom bracket to the center of the front dropouts; c) the distance from the center of the saddle to the point at which the handlebars meet the stem; d) the distance from the nose of the saddle to the imaginary centerline connecting the mid-points of the brake levers.
10. What is Q Factor? a) the distance between the insides of the crank arms; b) the distance between the outside of the crank arms at the pedal hole; c) the distance between the innermost portions of the left and right pedal cages; d) the diagonal distance between the crank arms at the pedal hole, when the cranks are in riding position.
11. What does Q stand for? a) Nothing; b) Quotient c) It is a reference to "Q-angle," a relationship between the hip bone and knee; d) Quack
12. Why was the V-brake developed? a) Because tourists and mountain bike riders needed a lighter, more powerful brake; b) Because cantilevers posed brake-cable routing problems on many modern mountain bike frames; c) Because there were lawsuits related to improperly set-up cantilevers; d) To comply with increasingly strict clearance regulations from the Consumer Product Safety Commission.
13. What is the diameter of a typical road tire: a) 670mm; b) 650mm; c) 700mm; d) 27-inches.
14. What does OCLV stand for? a) Oval Compression Low Vector; b) Optimum Contact Low Void; Omnipotent Cycle-Like Vehicle; d) The first letters of the four Trek engineers who developed the process.
15. All else equal, which head tube and fork rake combination is best suited to loaded road touring with 700c wheels? a) 73° x 4.5mm; b) 72.5° x 5mm; c) 74° x 4mm; d) 72° x 4mm
16. Which material is the lightest? a) Magnesium; b) Aluminum; c) 853 steel; d) Titanium
17. Who invented the quick release? a) Simplex; b) Campagnolo; c) Sturmey-Archer; d) Bendix
18. Who invented the tube-butting process? a) Columbus; b) Reynolds; c) Mannesmann; d) Babcock and Wilcox.
19. If your pubic bone is 85cm above the ground when you're barefoot, what's your most likely saddle height, from the center of the bottom bracket to the top of your saddle? a) 95cm; b) 75cm; c) 72cm; d) 100cm.
20. Which manufacturing process is best suited to small production runs? a) investment casting; b) machining; c) die casting; d) forging

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Carradice Saddle Bonnet — \$15

Protect your **R 17** from unnecessary rump sweat and rain? We're not

the harm? It doesn't have the cow hormones and hair to protect it anymore. It's up to you, as usual. It's always up *to* you. Black nylon, fits the B.17 close to perfectly. **A Rivendell exclusive. 11-014**

Zefal HPX Frame Pumps — \$30

Yes, we realize that raving about a pump and then offering it for sale blurs the line between advertising and information, but this really is the best and most durable frame pump around; it is definitely a classic, and with more and more bike shops selling other brands distributed by powerhouse distributors, you don't see this one so often anymore; so our carrying it is partly in keeping with our unofficial policy of not stocking stuff you can get at any old bike shop.: To determine which model/size to get, measure the space into which you aim to stick it, then follow the following chart:

Model	Fits gaps from	Part No.
HPX-1	42.5 - 47.5	28-011
HPX-2	48 53	28-012
HPX-3	53.5 - 58.5	28-013
HPX-4	59 - 64	28-014

Buckle Pads are Back! — \$6

Made for us by Duluth Pack, from scrap leather. Thick, hearty, a real mouthful on a chilly winter's evening. The fit is snug, usually requiring teeth or a needle-nosed plier to grab the tip for the final pull-through. But they are the nicest buckle pads ever made, and we got them..

Usually brown. They look great with any color toe strap. **14-007**

Avocet Toe Straps — \$8

Blue, thick leather. Dark blue. Made in Italy, most likely, or maybe France, in the '80s. They look really expensive with the new buckle pads. All we need now are wooden toe strap buttons, and yes, we're working on it. Not full-time, but they're coming. **#14-040**

Rivendell Gift Certificates

We have these now. Again, after a year or so of not having them. A fine gift for the beeswax fan, pine-tar soap needer, or cyclist on your Christmas list. They're thick, with blue and black ink decorated vignette-style with a generic mountain biker-type fellow. Two-part carbon-style; you get the top copy, we keep the bottom. In the following denominations, for the following (prices):

Denomination	Price	Part No.
\$25	\$24	24-082
\$50	\$47	24-083
\$75	\$71	24-084
\$100	\$95	24-085

MKS Royal Nuevo Keirin pedals — \$75

A pro-PLUS quality pedal, with the NJS seal of approval to prove it. Silver, track style road pedal. Light, smooth bearings, and it looks good. Probably the best quality road pedal available in this country. For toe clips and normal shoes. **14-029**

SunTour Grease Guard Bottom Bracket — \$25

Enolich (fits most non-Italian frames) with 115 spindle. Wilderness

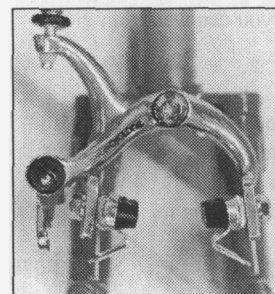
Trail Bikes designed these, SunTour made them, they're super Pro quality, and you can squirt in new grease and push out the old stuff. It works great, I've done it. there's nothing tricky about it, but you need a grease gun. Get a Dualco at your local auto parts store. **12-067**

Toe Strap Buttons — \$1

Toe straps don't need buttons, and it's not even a case of once you've tried them you won't want to do without them; but still, toe strap buttons are handy, fun, light, cheap, and there's just no disadvantage to them. They're probably going to die out like so many other mini-parts left over from the pre-technical age. Then what? White or red plastic. **White: 14-037 Red: 14-035**

SunTour Professional Brake cable housing — \$7

Road cables and lined greyish taupe housing that goes with everything, and our price is cheap. If a) Your bike is 57cm or larger; and b) You run non-aero cables; then c) You'll find the rear cable isn't long enough, so you'll have to buy d) part number IS-065. for another \$2. Then, you can use the extra original SunTour cable for a front brake, or an aero-routed rear (since aero cabling is shorter). **15-025**



SunTour Cyclone Sidepulls — \$45

Short reach (up to 50mm). Fits on every modern road bike in the universe. Solid, high quality, no-nonsense sidepulls that will serve you 20 years and never give you any problem. They have wheel guides, a micro-adjusting quick release, a rubber-gripped barrel adjuster for fine-tuning...all the features all sidepulls ought to have. The single pivot design is not as powerful as a dual-pivot, but it's

plenty powerful enough for someone with normal hand strength. The arch shape is way more fender-friendly than are the arches on dual pivot sidepulls. Great brakes. Silver and good, and a fantastic value. Sold per bikesworth. **15-026**

Nitto Aero Stem — \$15

These are top Nitto quality and equal or better than the best to ever come out of Italy. Cold forged, with a 140mm quill (longer by 5mm than Cinelli/3ttt). Most places, that extra 5mm would be praised to high heaven, but here in the homely house we like much longer quills, and we have Pearls Technomic Deluxes, and our own lugged stem, all of which have longer quills. But, if you want a super quality stem, and can live with a quill that's just a little longer than normal, and you're down to your last \$15, you shan't find a better deal than this, not even on ebay.

Two lengths left: 8cm and 10cm. 26mm clamp, and standard 22.2mm quill for one-inch threaded steerers. **8cm: 16-011 10cm: 16-009**

SunTour XC9000 Front Hub, 32H — \$20

It's a quick-release hub without the quick-release, but we have those, too. Cold-forged body, finely polished till it gleams, sealed AND

shielded bearings, angled flanges to reduce spoke stress and breakage—my gosh, what else do you want for less than a pizza dinner with cokes? These hubs will last, maybe forever. What's going to kill them? I can't imagine. The bearings are as smooth as bearings get.

The shield protects even the seal from dirt; and when the time comes to replace the bearings (10,000 to 30,000 miles from now), it's easily done with a cheap tool which we don't yet stock, but you can get it elsewhere and we'll probably have it before you need it, anyway. Twenty bucks. Thirty-two holes. **18-052**

Carradice Camper Longflap — \$75

For the maximalist commuter, practicalist shopper, or minimalist tourist, this is the bag of choice. It mounts onto a saddle-with-loops, such as the Brooks B.17, or to a Nitto Uplift. Huge capacity for a saddlebag. Holds a sleeping bag or tent, or a laptop and tons of other stuff; and the side pockets hold standard sized water bottles or tools and food. Tie extra gear on top, using the handy D-rings. Made in England, with some details just for us (not standard on Campers). Only upgrades, of course. Black, waterproofed cotton duck, with wood, leather, and metal fittings. **20-006**

Gloves-With-Dots-and-No-Fingertips — \$

If your fingertips get too hot in cold weather, or you're merely a splendid and contemplative wintertime knottist, then we've got just the thing for you. They're 85 percent wool, 15 percent other, grey, and the palms have little rubber dots on them that aid grip and eventually mush all together, but still work when that happens. One size fits everybody except little kids and people with really small hands. They're good for cool-weather cycling, down to about 40 degrees. Below that, you'll want the tips. I know—you can wear thin gloves underneath them! Do that! **21-024**

Smartwool Sox — \$9

The best cycling-specific sox made, and equally good for just walking around in when low sox are appropriate. Now 65 percent wool, with nylon and elastic making up the other 35 percent. If you ride in cycling sox, these are the ones you should be riding in. They're the best cycling sox we've used.

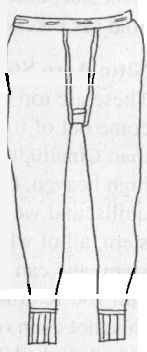
S: 22-067 M: 21-082 L: 22-069 XL: 22-070

Thin Wooly Bottoms! — \$24

During the past 3 years we've had two or three requests for these, and if you remember being one of those, we expect you to step up to the plate. They're the same cream-colored wool as the tops. Good for wearing under your regular pants during the winter, or for pajama bottoms during the cooler months; or under shorts of any kind. Fine for cycling if you don't mind not being mistaken for a pro. Versatile, you'll find a use for them 40 to 90 days out of the year, depending on where you live and how fashion conscious you are.

Sizing: Small to 32. Medium, to 34, Large to 36, XL, to 40. They don't shrink much, tend to be baggy in the crotch (yes, even on you!) but if you wash them hot and dry them hot, they'll shrink some. The thing is, they're underwear, so you shouldn't be too picky.

S: 22-067 M: 22-068 L: 22-069 XL: 22-070



Bridgestone Catalogues — \$7

Lots of good information and questionable opinions in these. Great illustrations, 100 percent post-consumer waste, acid-free, archive-quality paper, and printed by one of the most expensive printers in the country.

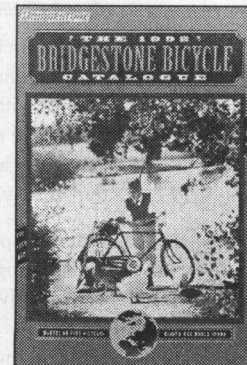
Highlights:

1992: Cold-forging, gravity casting, melt-forging, tube joining techniques, friction shifting in an indexed world, How To Get Sponsored Even Though You Aren't Famous, Wool Stuff, questioning component designs, Q Factor, Natural chain lubes, and tear-out bicycle cards.

1994: Designing for durability, Var, the French toolmaker, How Green Thou Art by Maynard H., Richard Sachs on lugcraft, Ted Costantino on why Olympians should ride the same kinds of bikes, How Stamped bike parts are made, how steel tubes are butted, how seamless tubes are made, how seamed tubes are made, Hail to the Cheap, a product manager's look at how production bikes are spec'd, sand casting, a fantastic, amazing, A++ quality selection of articles on how steel, aluminum, and titanium are made, and the environmental toll of each, a fascinating story on Nokona, the last of the all-American Baseball glove makers, and some predictions about the future of bicycles that are already coming true.

1992 Bstone Catalogue. 23-009: \$7

1994 Bstone Catalogue. 23-010: \$7



Pine Tar Soap — \$4

Refreshing smell, not perfumey or chemically just good. It's chocolate brown, but lathers white. Cleans better than any other we've tried, including Fels Naptha. Our best-selling item, and we sell the large, 1/4-pound bar not usually stocked by the few other places that sell this one. As good or better than any shampoo, too. One bar does all! **25-001**

ALE Bottle Cage — \$10

Chromed steel. Thin, strong, good-looking, and so practical. Face it, plastic cages look terrible and jettison bottles on rough descents; aluminum cages blacken bottles and look cheap. The only other decent cages in the whole world are the King Cage, which we don't sell but still like; and the Ciussi, which isn't as good as the King, but it's still a decent cage if you get the stainless one; and the Nitto, which we do sell, but it costs a lot more than this. **29-001**

Khaki Banana Bag — \$65

The Khaki ones are supposed to say Baggins on them, but they actually say Duluth Pack, just like the Olives and Greys of old. We have about 25 of them, and we're discounting them \$10 because of this. Future Banana bags will have the double-B brand. **20-053**

Grey Banana Bag — \$75

Some bikes just look better with grey. These are the last grey ones we'll have for a long time. With the Duluth label. Deluxe bags; if you've never used a Banana Bag, you're in for a treat. **20-048**

Shimano/Tange Cartridge BB tool — \$10

To install or remove any Japanese-modern cartridge style BB. **19-055**

Olive Banana Bag — \$75

The original color. After 15 years it fades to khaki, and of course it'll last that long! **20-041**

Baggins Bags Key Fobs — \$3

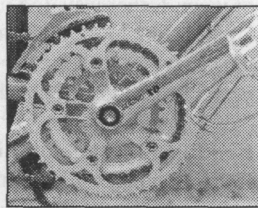
You can't afford the bags, but you need a key fob and can't find one on key fobs.com or e-bay? Then get this good one. Thick leather with the Baggins Bags logo, and a solid brass-looking key ring that's more than likely the real thing. Non-transferable lifetime guarantee for the original owner against defects in design, materials, and workmanship. Does not cover normal wear and tear, accidents, abuse, neglect or improper maintenance, or failures occurring in competition or in training for same. **24-086**

The Data Book — \$25

Originally published in Japan in 1983 to celebrate a small publisher's 50th anniversary. Fifty copies were made. Ten came to this country. We've told this story forty times. Anyway, the illustrations were garnered from French cycling publications between 1895 and 1954, and show many of each year's most innovative innovations. You'll see the first publications of many things that became standard. No text, just illustrations in chronological order. A recent, authorized republication after years of bootleg versions. **23-016**

Sugino XD-500 Crank — \$100

The best value in a versatile, 110x74 bcd crank today. Takes the widest range of chainrings, but comes with 46x36x24 or 26 (no choice). Silver, forged, low-160s Q-factor. On road frames or Rivendell A/Rs or Atlantises, it takes a 107bb. We have them.



170mm 12-167

175mm 12-190

Tange Sekai BB for Sugino XD500 — \$40

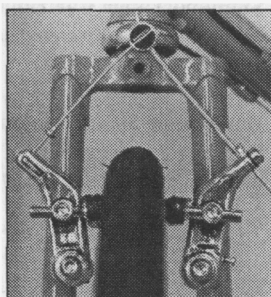
107mm spindle. Fits any Rivendell-Heron-Atlantis, or any road frame with English threading, and that's pretty much anything that's not Swiss, Italian, or older French. Tange makes Shimano bbs, and this is the Deore XT equivalent. No box, but with installation instructions. Requires a Shirmano-style cartridge bb tool, which follows. **12-191**

Dia-Compe Special #287 Cantilever-style Road lever — \$63

Some low-profile cantilevers work slightly better with this Dia-Compe brake lever. The lower the profile, the more they help. They pull more cable than standard road levers, and are big and comfy for large hands, too. **15-066**

Shimano CT-91 Cantilevers — \$28

A great deal on good brakes. Low-end Shimanos work great and set up easily. Cantilevers are rarer than they used to be, and if you have a non-museum quality hike around that you just want some good brakes for, these are a good way to go. **15-074**

**Boeshield T9 Spray for chains and anti-rusting any steel — \$13**

Our favorite chain lube, and we use it to anti-rust frames. It works great, doesn't smell or get messy. Boeing made it. White flour-carbonless aerosol. Enough for 9 frames or tons of chains. Ground shipping only, so it won't explode in the plane. **13-034**

Inner tubes: for fattish 700c tires — \$4

Up to now we've been using skinny tubes even on 700x38s, but it makes some sense to use a slightly larger one on the biggies, and now we have it. Recommended for 700x28 to 35, but we think they're too fat for the 28s. So, 700x35 up to 700x40. **10-001**

Last Chance on Nitto Randonneur Handlebars — \$34

We aren't stocking this model anymore, even though it's been quite popular. Long story, but here you go. 45cm wide, although they feel narrower. We recommend them for slight to medium folks, as opposed to Friar Tuck-types. Has a 26mm clamp. Beautiful bar at a blowout price (for a Nitto). **16-036**

The Best Handlebar Map Case — \$12

Made in Seattle by Cyco-Active. It comes with our Baggins Boxy Bar bag, but of course works without it, as well. Velcros onto the handlebar and rests on the stem extension. Thick clear plastic, sized to fit a standard sheet of papyrus folded in half. Excellent! **20-058**

Wheel Reflector — \$5 each

These are our own design, made just for us, and you're nuts if you don't ride with them at night. They weigh less than an ounce, go on and off in seconds, don't imbalance the wheel, and they dramatically increase your visibility. White reflective stuff. **21-080**

The BOOK OF NONSENSE is Back!!! — \$15

Our best-seller for 6 years. Originally published in 1848. Written and illustrated by Edward Lear, his most famous book. Full of limericks, short stories, illustrations, alphabets, a botany lesson. Nonsense but not corny or stupid. This is a classic book that absolutely would not be published if it hadn't been already. It is clever and fascinating. You wonder what was going on in his head. The edition we sell is a fine, cloth-bound one, with a sewn-in book mark and fake gold here and there. Just 350 of this edition are sold every year, and we sell about 40 percent of those. It belongs in every house with children, for sure—right alongside Pooh, The Wind in the Willows, Charlotte's Web, and Goodnight Moon. You won't likely find it in bookstores, and we've been out of it for 5 months, until now. **23-004**

Phil Wood hand cleaner — \$6

The world's best for getting grimy black stuff off. No slimy feel. Instant rinse-off. Our customers who try it once, come back for more, but the \$6 tub we offer here will last the home mechanic two years. My goodness, what a deal. **31-038**

Tombow Erasers are Back — \$2

A smallish white eraser that works magic on pencil lead. Not just compared to Eberhard Fabers, but compared to Stadler-Mars, too. This one's the best. We sold them last year, eventually ran out, and couldn't get them again for many months, during which time many of the folks who bought them pulled their hair out and got drunk. Well, now it's back. I believe we're the only source in this country, since Tombow USA does not import it. Made in Japan. This batch came from customer-friend Shawn, who lives in Taipei, where they're also sold. **31-043**

Eldi No. 61 Tire Lever — \$15

A month ago Eldi quit making those steel tire levers. My prediction is that this pedal wrench is next. I don't think they'll not have a pedal wrench in their line, but I think it will change. And, when it comes to simple things like this, the change is usually for the worse. If you have a few bikes and no pedal wrench, this is the one to get. The best ever. **19-051**

Priest Handlebar — \$18

Got one bike at least that you want to sit upright on? For shorter, family, casual rides? This is the best bar we've used. The bugaboo is getting thumb shifters for them, but heck, you can still use downtubers. Just don't shift as often. Any modern mtn bike shifters work, but we don't sell them. Anyway, this is a neat and smart and comfortable bar. Aluminum. The clamp is 25.4mm. **16-056**

Cork Grips — \$15

One of the more expensive grips you can buy, but they're cork, and that costs more than synthetics. Nicely shaped to fit your hand. Glue them on using Duro Brand super glue gel. Or something else, but by all means, make sure they stick before you ride in traffic. Some glues need air to dry. Duro brand Super glue gel works for us. Pliobond didn't. **16-103**

Avocet Hardpack Tire, 26 x 1.85 — \$30

A quite wonderful tire that never got a fantastic break in the market. It's a good mid-sized tire. Designed for hard-packed dirt, and no doubt it works fine for that, but it's also a great street tire. The inverted tread provides a smooth roll and good grip. Bhima here says, "The corner as well as the Roll-y Pol-y!" and you don't say stuff like that around here unless it's true. Ideal for heavy loaded touring with 26-inch wheels. It's also the only tire we offer with a trendy black sidewall—more evidence that it really must be a special tire. **10-036**

Avocet Cross 15 Tire, 26 x 1.9 — \$30

This is the tire you ride when you have a balloon-tire bike that you just never, ever, want to get a flat on. It corners well, as all Avocets do, and it has a thick inverted tread with a round and smooth (for smooth rolling) surface. Ideal for short commutes on the worst surfaces on earth, and fat enough for any off-road riding short of the real stupid stuff. You won't rave about these tires right away, but in 7 years you'll say, "Man, I wish I could get another pair of these; they've got only about another year to go, and I don't think I've ever flatted them. **10-037**

Nitto Aero Stems — \$15

Top quality Nitto stem that should, by all rights, sell for \$45, but since its quill is only 140mm long (which is long by road quill standards, but we like 'em longer), we're blowing them out for \$15. In 8cm and 10cm extensions only. The 8 is good for small to medium bikes, and works well with clip-on aero bars, which have those arm rests which raise the effective bar height, right? If you already have a Cinelli or 3ttt stem, and the bar height is okay for you, but now you want another stem extension, or just want to switch to Nitto bars, then get one of these. **18cm: 16-011; 10cm: 16-009**

Longsleeved Thin Wooly underwear tops — \$28

You'll wear it all winter long and well into the spring. You may give it a rest during summer, but it'll be back on by October. Light enough to wear under anything, and fine all by itself as a top. Good pajama top, too. These wool underthings don't smell, so you can wear them for days at a time. Whether that appeals to you or not, it's true. They wash easily. Hang to dry, it takes just a day. You'll get tons of use out of this, and it'll make your other shirts more useful, too. They don't shrink much.

S: 21-123 M: 21-1248 L: 21-125 XL: 21-126

Sleeveless Thin Wooly underwear tops — \$17

Sleeveless, and otherwise just like the others. Sleeveless t-shirts generally don't appeal to most people, because they tend to associate them with squalor, violence, and substance abuse. But that kind is cotton, not wool. A sleeveless wool t-shirt is great. It guarantees that you won't freeze, so you can wear it when you're afraid to wear something warmer, but still don't want to chance freezing. Wear it



under any shirt in the house. Wear it for anything. Layer it with other thin woolies (on top works best). If you have one, you'll wear it every single day during the winter and early spring.

S: 21-113 M: 21-114 L: 21-115 XL: 21-116

Shortsleeved Thin Wooly underwear tops — \$24

We sell these to folks who are afraid of being too warm or looking too poor. It's sort of an entry-level wooly undershirt, in that regard. But it's also good, obviously, when you want a little more underneath than a sleeveless. Also, it makes a good warm weather jersey all by itself. We've asked the maker to do it up for us in a different (not cream) color, but were told we'd have to order either 1,200 or 1,2000 of them. Either way, too much for us. Try one of these. If you have all three, the most practical layering works like this: Skin-shortsleeve-longleeve-sleeveless. We're out of large until after the first of the year. **S: 21-117 M: 21-118 L: 21-119 XL: 21-120**

Bontrager custom-for-Rivendell Fairlane 36-H rims — \$30

Keith Bontrager is a smart fellow. If we were rich and could hire him away from Trek, I'd do it. That will never happen, but he is really smart, and good, and has contributed many good things to bicycles. He designed these rims. We wanted them in 36-hole, instead of the normal 32. They're probably strong enough in 32H, but 36 is stronger, and we wanted 36, so they/Trek made them up special for us. See? Just because they're big and mainstream and we're not doesn't mean we hate each other! Anyway, we feel this is the best rim made today for heavy duty road use. It's neck-and-neck with the Sun CR18, but the Fairlane is available in an asymmetrical rear version, which noses out the CR18. It's 22mm wide, and has all the right stuff and none of the wrong stuff that a touring rim should have. We have fronts, too. The fronts are fine for rear wheels, but they aren't asymmetrical. **Front: 18-114; Rear: 18-115**

Shimano/Tange Cartridge BB tool — \$10

To install or remove any Japanese-modern cartridge style BB. **19-055**

Dia-Campe 505Q Standard Reach Sidepulls — \$20

See page 35. Inexpensive, fine function, easily spiffed-up. Allen-nut mounting fits modern road frames. **15-081**



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