The Rivendell Reader

Issue No. 26 May-July 2002

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24-115

A Quarterly For Bicyclers

When Rope Swings Didn't Get Chopped Down

Have you noticed that there seems to me more anger in cycling publications than there is in publications such as the *National Geographic, Newsweek, The Smithsonian, and Redbook?* A lot of it's in the Letters sections. An angry reader writes, scolding the magazine for an opinion or a change in format or style, or a review not agreed with, then the editor puts the writer in his place (always a him) in a way that's often meaner.

I think email is partly to blame, because it doesn't give you time to calm down first. That often explains the letter that started it all, but it doesn't explain the comeback. Email does a lot of good and I'm all for it, but still. By email, an innocent question becomes an accusation. People read sarcasm where there isn't any. A short, efficient answer becomes curt, which leads to an overreaction ("Well, excuuuuse me for taking your valuable time!")

Anyway, it makes me uncomfortable to read that in any publication, and I find it embarassing to read it in cycling publications. It is legal but impolite, and it must hurt people's feelings.

Sometimes you hear people say, "Don't be so sensitive!" but some people are just more sensitive than others, and what's the goal, anyway—less sensitive people? That doesn't sound so good. How would you like everybody you come into contact with tomorrow to be not-so-sensitive? It would be a bad day, I think, so…if you're one of the less sensitive ones, be nice to the more sensitive ones.

We are trying to make the *Rivendell Reader* informative, but not hurt anybody's feelings. It can be tricky, because if you state something as a fact or even as a strong opinion, it can hurt people's feelings. A certain amount of that is inevitable, but I don't want to get to the point where I figure there's nothing I can do about it, and it's somebody else's problem. It's something I ought to think about.

In this issue there's a story about horseshoes and horseshoeing. If you're like me, you obviously know what a horseshoe looks like, and you probably pick one up when you find it laying around, but your horseshoe knowledge stops there. True, you can research horseshoes on the net or in your library or bookstore, but nobody will actually do that; so it's in here.

We ought to have more product tests and reviews. In the next issue, maybe we'll start. Our focus is traditional gear, but I want the *Reader* to become a good source of general bike information, too, so you'll have to excuse some future reviews of things that aren't right up our alley.

A friend of mine has owned a bike shop for 40 years, and he says teenage kids go there to have him fix their flats, and he thinks they should fix their own. He also said he handed one of them an adjustable (Crescent) wrench to take a wheel off, and the lad didn't know how to make it open and close. That story drives home something I've been thinking about a lot lately, namely that today it is easy to get into bikes and getting fit with them, without actually learning the fundamentals. So, every issue of the *Reader* has some sort of Fundamentals section. In this issue, it's how to fix a flat. Maybe you already know how, but maybe you don't. If you do, maybe you'll learn something anyway, or maybe just verify that we do it the same way. If you have a better way to do it, I'd like to hear. I've fixed about 290 flats in my life, but if you've got a tip that'll help me do it faster or easier, I'm all ears. I often get tips from readers, and I learn a lot from them.

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The Rivendell Reader

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Off the web: rivendellbicycles.com

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FAX: (925) 933-7305
or 1 (877) UPS COW-LUGS

QUESTIONS FOR ANDREW ABOUT YOUR FRAME ORDER:
mail, or fax: 1 (877) 269-5847
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EDITORIAL, CONTINUED

Iowa member Scott Bontz makes brooms from corn stalks carried back home in his Nelson Longflap. You can do this, too.

There are so many different factions in bicycles, and that is great. We defend our ways, and try to explain them in detail (the reasons), but if you ever find us sounding mean about it, please tell me, and I'll stop it. It's basic good manners, and I don't want my strong feelings to get in the way of them. I don't want to do or say anything that my mother-in-law or my children would be ashamed to read about, or that I'll regret later.

By now most of you have seen our new website. A customer of ours, Raymond Galang, did it. Many of you have had a hard time finding the Gallery section in it, where you see lots of Rivendells and Atlantises built up all kinds of ways. Now there's a Gallery button, and it's easy as pie.

Also, all of the *Readers* are viewable as PDFs on our website. This happened in response to popular demand, so those of you who are into computers, have at 'em. I'm tired of getting so much junk email, mostly from companies who want me to buy a car or refinance a house, or think I want to find out things about people I haven't seen for 30 years, or consolidate or reduce my debt in two, and so starting June 15 I'm changing my email to gep@rivbike.com. I heard this was a good way to fix that, for a while, so I'm trying it.

We've been working on the WoolyWarm clothing line, and our bag line, and new frames or bikes for Spring '03, and it's taking a bit of time, but some good things will come of it. By mid June we ought to have our first run of short-sleeved WoolyWarm jerseys, and please consider buying one. They're cut on the fat side, so even if they shrink some you'll still have room. You can pretty much order the size you want to wear, and it'll still be a bit loose. The samples are good & comfortable. If you live on tea and hard tack and ride 300 miles a week, they'll be baggy on you. Women's cuts will follow soon.

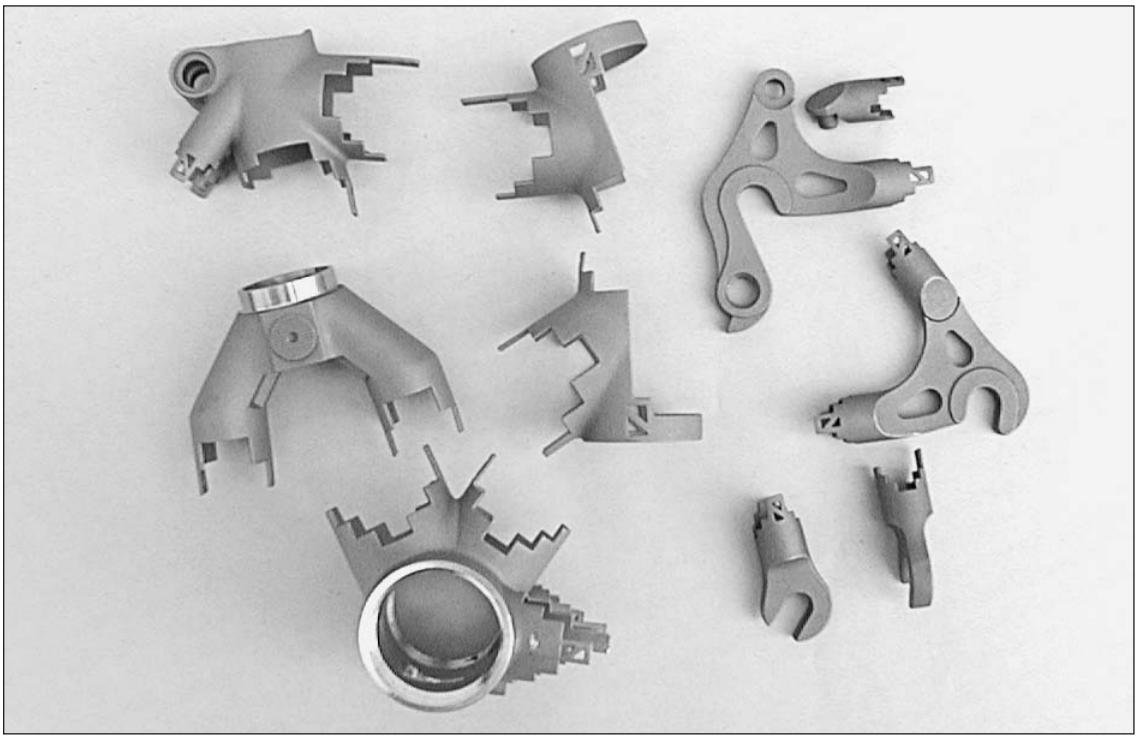
Thanks to all of you who filled out the survey in the last issue. I'm using them as a guide to make the *Reader* better. I hope you enjoy this issue. The next one will be better! We're still trying to up our membership (subscribers), and I know it gets tiring, hearing that every issue, but it's important that we do it, so any help you can offer, good.

You know that new razor, the Gillette Mach 3 Turbo? If you hate shaving as much as I do, get that sucker. You can't even feel the blade, and you don't have to shave UP under your nose, because it reaches high, even though it doesn't feel like it does. If you don't have any warm fuzzy feelings associated with straight razors, or particular loyalties to other brands or models, try it. I think there's a women's model, too. *—Grant*

Save Money, Maybe

The easiest way for us to receive orders is online. We are grateful for any order, but if you live in the lower 48 and can order $100 or more online (www.rivendellbicycles.com), we'll give you free freight (wheels and frames excluded) between now and the end of June. Our Spring catalogue is out. If you don't have it, please call (925) 939-3313 or fax (925) 933-7305 or email (jbennett@rivbike.com).

In every issue we look in detail at a lug. We cover a variety, from good to bad, old to new, ugly to pretty, ones we like and ones that aren't our cup-of-tea. "Lugs" also includes fork crowns and bottom bracket shells—in other words, any frame fitting that requires brazing rather than welding. Because lugs are the best way to join tubes, after all, and there is such variety. Here's an extreme example. Few readers will feel neutral about this set of lugs.



Here's the whole weird family, dropouts and all. The dropouts are "chop and plug" style—the builder just chops off the tube, inserts them into the dropouts, and brazes them up. The finished joints look heavily worked on and time consuming. Notice the "floating" seat stay socket, a clever detail that allows a good fit on a huge range of frame sizes. Ordinarily—at least with the forged dropouts we use—there's more work involved to make the rear dropout joint look good. Finally, the quite attractive windows in the rear dropouts mimic those in the no-longer available George Wilson dropouts. We use forged dropouts, and they're getting harder to obtain. It's good to know Long Shen can cast anything we like, and if we ever did verticals, they'd look a lot like these do, minus the steps

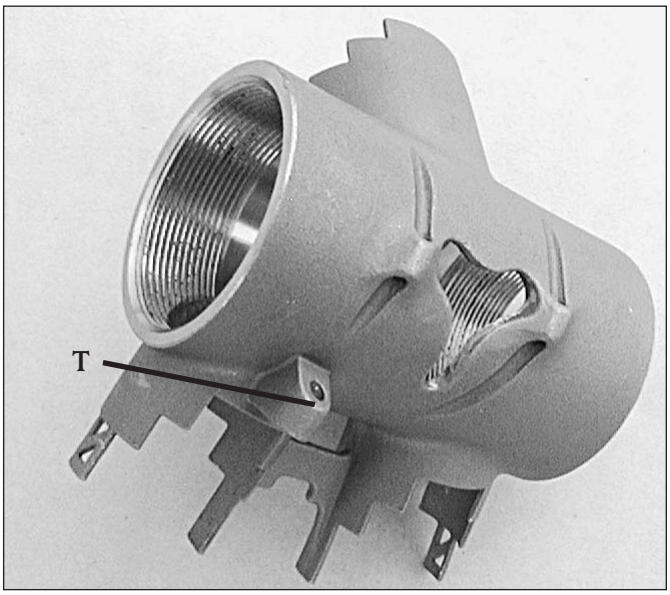
Lugs From Macchu Picchu?

These here are the oddest lugs I've seen. The only lugs remotely similar were used on old Peugeot UO-8s, the one-step upgrade from a Schwinn Varsity, in the late '70s and early '80s.

Steps and sharp corners are not what you expect to see on lugs. Usually, lug designers have either quick brazing or style in mind; sometimes a blend. Quick-to-braze lugs have less shoreline than these do, and no windows at all. Stylish lugs generally look softer, more flowing than these. A builder could, conceivably, start with these lugs and reshape them, using the corners as starting points.

It's doubtful there are any frames in America built with these lugs; although I've seen a photograph of an English frame with them. This style of lug is severe, extreme, and doesn't appeal to everybody, but it's a good example of what's possible with casting. The little windows in the steps would be impractical to make by any method other than casting, and certainly casting brings a consistency to the lugs that would be impossible by hand-carving.

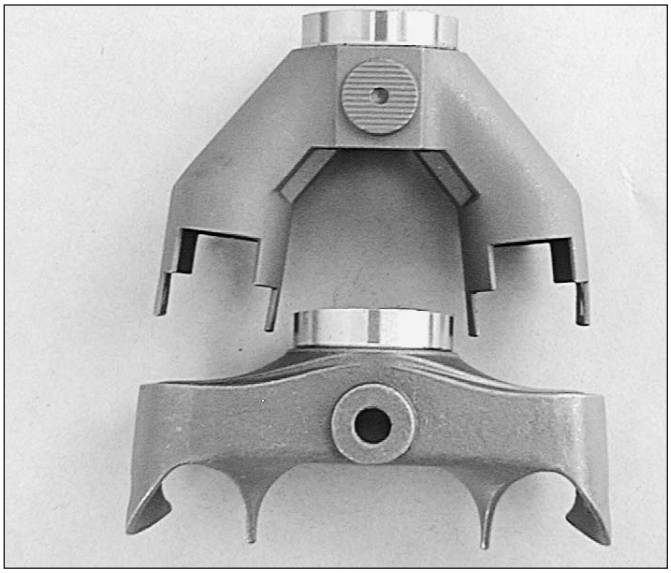
You don't see a lot of these around. It's a Renaissance brand frame, made with stainless steel Aztec lugs, and it was there at Long Shen, so we shot this photo. The lugs here are stainless steel, polished. We might get some of ours in stainless, also. Not sure.

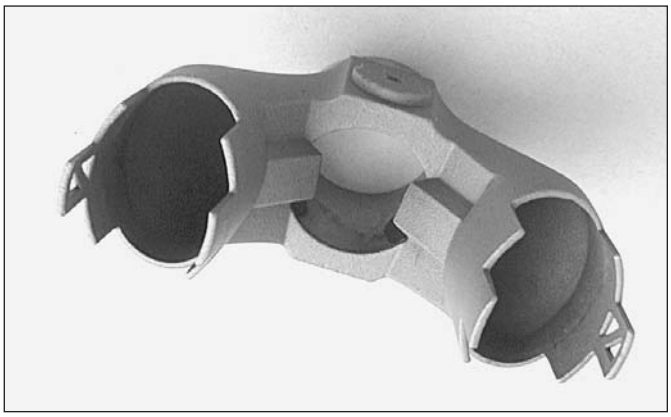


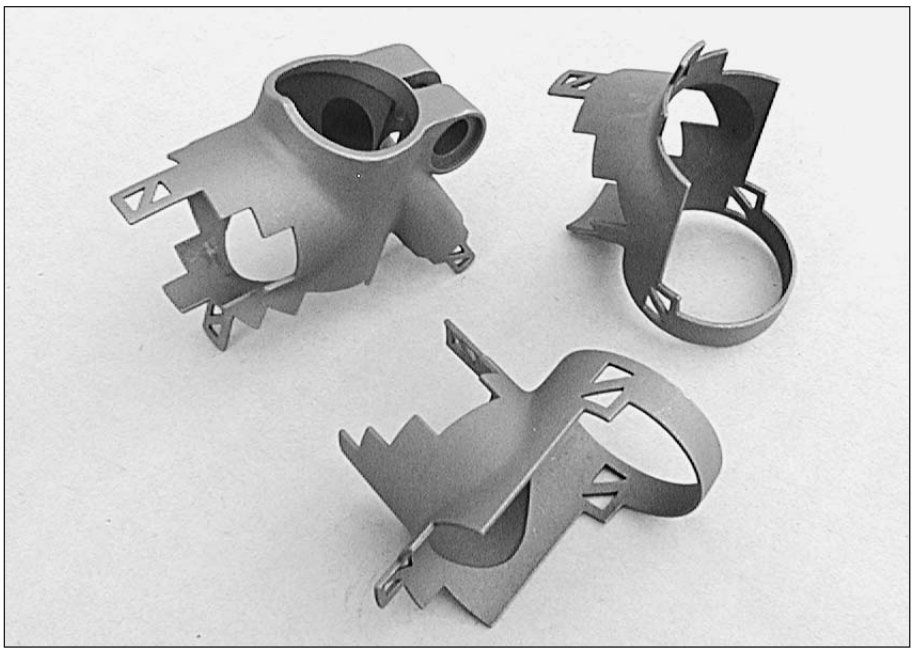
Above: The bottom bracket shell from below. There's a lot going on here. The cow's head-shaped hole lets water drain (on our new shell it's a simple hole). The grooves, of course, are cable guides. These are covered, so the cable won't come off. Usually it won't, anyway, because there's always some tenstion keeping it there. (On our own BB shells, we use raised rails to guide the cables, with no covers.) T is a tunnel guide, which seems superfluous. It's for the rear derailleur cable, but once the cable is on its way there, it's going to take the most direct path, anyway.

Right top: Comparing the Aztec crown with our standard road crown. The Aztec model is for skinny tires only; the fork blade separation isn't sufficient for much more than a 700x28, and even then, if a spoke breaks, the tire will rub.

Right bottom: The underside of the crown looks complicated, but this is often the result with computer-aided designs. The rectangle is consistent with the blocky theme of the lugs.

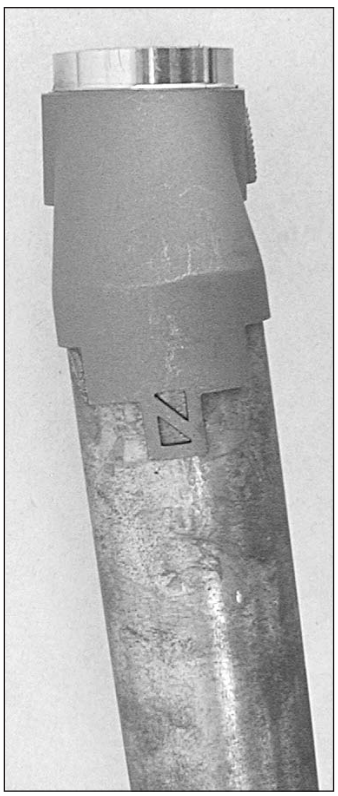






A good view of the three main lugs. Note the integral seat stay sockets on the seat lug. And, ordinarily lug designers go for curves and points, rather than steps.

Right: The fork crown is cast angled forward, which dictates straight blades (no rake). Some people like the look, some people claim they can tell a positive or negative difference in the way straight-bladed forks ride. We tend to think that rake affects appearance more than it does ride, and favor the look of a small radius bend that starts low on the fork blade and continues curving all the way to the dropout. These wild lugs combined with straight-bladed forks makes a rare combination, for sure.



The Reader Plan

(What To Expect In the Coming Issues)

Letters: Starting next issue we'll have a regular letters column (missing in this issue, had to delete it to make room). The letters we're likely to print will be informative, entertaining, insightful, and not mean or angry. They need not be responses to the current stories and columns, but may be. Letter submissions should be mailed to RBW-LETTERS, 2040 N. Main #19, Walnut Creek, CA 94596 or emailed to gep@rivendellbicycles.com, and put **LETTER from Your Name** in the subject field. Edited for clarity and to fit the allotted space. Pays nothing!

Technical Q & A: If you have a good general purpose technical question (anything about bike function qualifies), send it to gep@rivbike.com, with **TECHNICAL Question / Your Name** in the subject field. We'll try to fit it in, but you'll get your answer before it appears in print.

Feature stories: We're more interested in subject matter to fill the topics, rather than submissions. But if you have special knowledge and can expsplain it well, send your idea to **gep@rivbike.com with FEATURE pitch from Your Name** in the subject field.

Borrowed/reprinted stories: We're always eager for good ones that might interest our readers. If you read something you like that you know hasn't been read by most of our bicycler-readers already, send us a copy and tell us what you know about the source, and we'll take it from there. If we reprint it, you'll get $100 credit.

Following is our plan for subsequent issues. All kinds of things can alter it, but this is where it sits now. Not all *Readers* will contain all sections.

Editorial: Unexciting monologue.

A Look At Lugs: We look at and comment on lugs from the past, present, or future.

Mechanical How To: We show how to do something to your bike.

Ed & Fred: Ed Pavelka and Fred Matheny talk about how to go fast and other things that I don't feel comfortable or qualified to write about, but can help you become an all-around cycler.

Fundamentals: Something basic that everybody should know how to do, but lots of folks don't. We try to show you.

Chuck's Bikes: Member Chuck Schmidt has lots of neat bikes, and he says he'll show us one per issue for the next 50 years.

Henry Kingman: Henry, who certainly can be more prolific than he's been called upon to be lately, suggests he's good for four stories a year, generally about riding a bicycle. Nobody knows more about that than Henry, and he's a good writer, too.

Classics/Historical: Lots of neat stuff happened in the past. We bring it back, so you either learn what you missed out on, or remember it once again. Some of it's wacky, some good.

Framebuilder Section: We've already covered the major steps in building a frame, and it seems silly to feature "fluxing tubes," but we're on the lookout for other framebuilding topics to talk about, and we'll do that as they crop up.

Medical: Two more columns on medical issues that you might want to think about, just a little.

Opinion: Member Peter Moore sent me something I thought was pretty good, and I asked if he could come up with more things like it. He said yes, and I'm hoping he's right. Four of these, starting in RR27, if it all works out. We'll see.

Interview: These are a nightmare, logistically, and they're hard to lay out, but there are lots of good people out there to talk to, and we'll try to do at least 3 interviews per year. The next one: Charlie Cunningham.

Bike Review: It seems natural for a bike publication to include bike reviews, but we've been getting away without them, for the most part. According to the survey in the last issue, you'd like to see more of these, so here they come. We'll pick out bikes we like that have something special to offer—even if they aren't, you know, lugged.

Book Review: It might be a bike book, but we won't limit ourselves to that. Likely, it'll be a Neville Shute book. He's a good author, his books are hard to find, but we'll get some for you…

Bike Setup: It's always interesting to see how others put bikes together, and we'll show you our way. In each issue we'll do our best to make it instructional and actually useful.

Who Rides a --? Rivendell, Atlantis, Rambouillet… Each of the bikes has a lot in common with the others (lugged, steel, good clearance, comfortable..) but their owners are all over the map. If you want to be featured, follow the format shown in this issue, send a picture posed the same way, and we'll put you in line. JPEGs to gep@rivbike.com as attachments to your bio (same questions as in this issue). Or a non-returnable print and handwritten information.

Tool Review: Tools are fun, and there are lots of single-purpose tools for bikes that deserve their day.

Science Section: One of our members has agreed to write a superscientific section on some aspect of bikes. If he comes through, we'll run them.

Widget Review or Two: Self explanatory. Sometimes it'll be something we sell, sometimes maybe not.

We're always welcome to other ideas. The approach will stay the same, the topics may vary. We won't cover racing, since others do that well enough anyway; and we aren't too much into bike travel (*Adventure Cycling* does well at that), although if the story's particularly good, we might break that rule.

Where Besides Here To Get An Atlantis or Rambouillet

A Word About Our Dealers

We try to keep our dealer list small because we don't have the staff to manage a big group, or the capacity to supply more than a few hundred frames a year to dealers. So, we're really picky about who gets on the list. This is NOT to say that these guys are necessarily your idea of a Dream Shop, and it's not a knock on your favorite dealer who doesn't happen to sell them. It's just that they wanted to sell Atlantises and Rambouillets (a good start), and something about them seemed right to us here.

If you live by one of them, stop by and see a frame or bike. Call first to make sure it's in stock. If you'd then like to order one, please order through your dealer, especially if they spend time talking with you about the bike. We don't require you to buy locally, but we absolutely encourage it, and you'll save shipping cost, too.

Few of these dealers stock the full range of sizes. We require them to buy 3 frames on their initial order, and after that, they can order singles. Since we usually run out of frames before the next delivery, you may have to wait a few weeks or even a couple of months. It sounds outrageous to have to do that, but then, these are outrageous frames. They are made by hand by a small shop (Toyo) in Osaka, and there's just no way to rush them.

During the year and on our website (rivendellbicycles.com) we'll update this list at least monthly.

Many of these dealers have their own sites and also sell by mail, so don't hesitate to contact them even if you live far away. Thanks. —Grant

Rambouillet Dealers

(Besides Us)

Campus Cycle
Denver, CO
ph: (303) 698-2811

Rich's Bicycle Works
Greely, CO
ph: (970) 356-7617

World of Bikes
Iowa City, IA
ph: (319) 351-8337

Williamson Bicycle Works
Madison, WI
ph: (608) 255-5292

Kenwood Cycle
Minneapolis, MN
ph: (612) 374-4042

Harris Cyclery
West Newton, MA
ph: (303) 698-2811

Peter White Cycles
Acton, MA
ph: (978) 635-0699

College Park Bicycles
College Park, MD
ph: (301) 864-2211

Atlantis Dealers

(Besides Us)

Cupertino Bike Shop
Cupertino, CA
ph: (408) 255-2217

Old Town Cyclery
Lenexa, KS
ph: (913) 894-5588

Aaron's Bicycle Repair
Seattle, WA
ph: (206) 938-9795

Williamson Bicycle Works
Madison, WI
ph: (608) 255-5292

Kenwood Cycle
Minneapolis, MN
ph: (612) 374-4042

Harris Cyclery
West Newton, MA
ph: (303) 698-2811

Peter White Cycles
Acton, MA
ph: (978) 635-0699

Bicycle Sport Shop
Austin, TX
ph: (512) 477-3472

The Spokesman Bicycles
Santa Cruz, CA
ph: (831) 423-5683

Acme Bicycles
Rapid City, SD
ph: (605) 343-9534

West Hill Shop
Putney, VT
ph: (802) 387-5718

Velo City Cycles
Holland, MI
ph: (616) 355-2000

How handlebar height affects how far the bars are from you; and why that means top tube length is something you shouldn't harp on.

In the following photos, we took two 60cm bikes, each with a 58cm top tube. The bike shown on this and the facing page is a prototype Rambouillet, and has a 72-degree seat tube, a 2-degree upsloping top tube, a 15mm extended head lug, and a longer steerer than normal. The other bike is a nice old Fuji, a fairly typical design, without the built-in height increasers that are standard on our bikes (Rivs, Atls, Rams). Since it lacks these, the bars can't get as high, but they *can* get lower. That's a good thing for this demonstration, because you'll see how handlebar height affects handlebar distance.

As you look at the photos, notice how, on each bike, the nose-to-bars distance increases as the bars get lower. And, understand that this absolutely, without a doubt, proves the folly in deciding to get the smaller of two possible bicycle sizes based on the smaller one's having a shorter top tube.

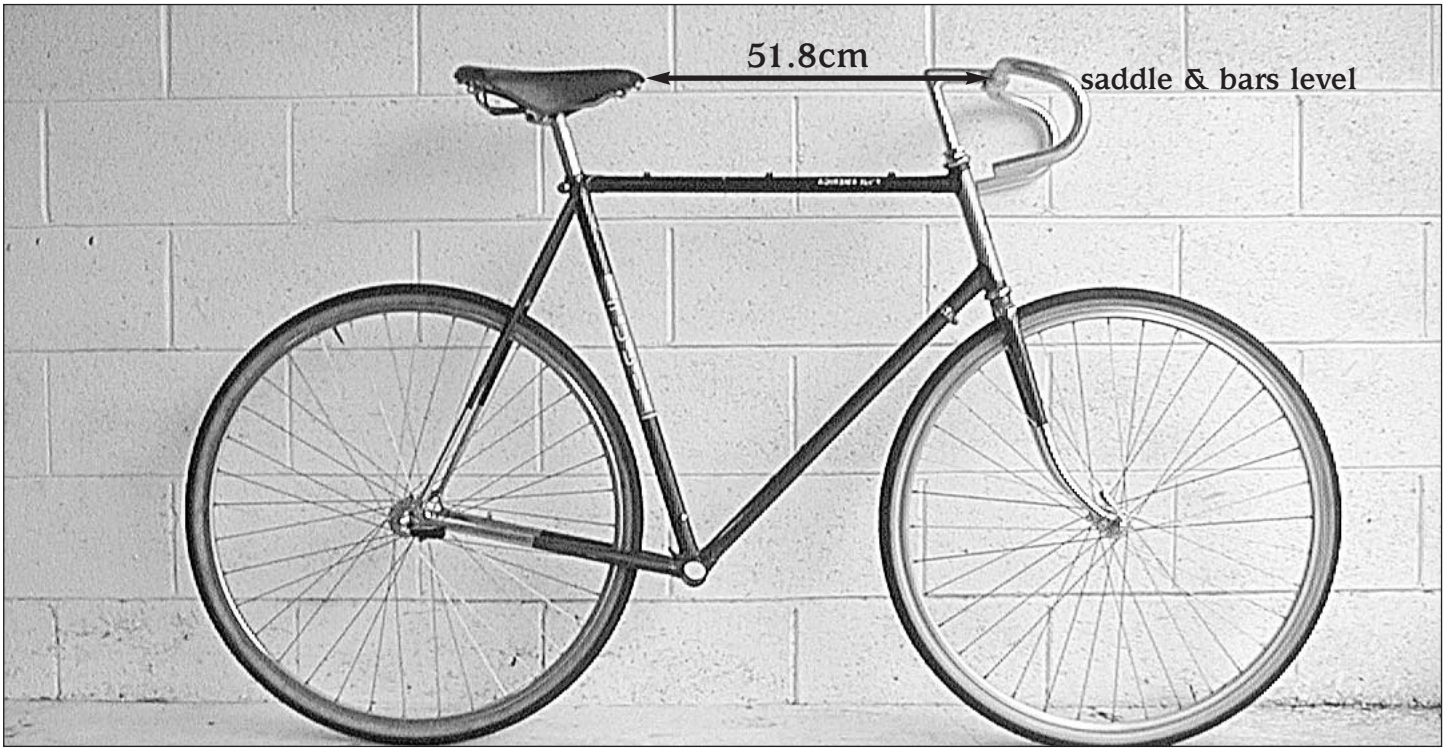
Another thing to throw into this mix, shown near the end of the photo-pages, is how higher bars use more of your arm's length, since as the bars get higher, the angle of your arms becomes more horizontal.

Finally, we included some photos showing how aesthetics are affected by going bigger or smaller on the frame, and higher or lower with the handlebars. Aesthetics are a personal issue, and you don't have to lock in a certain look on all of your bikes. You may even find your preference changing for no particular reason, as time passes.

A starting point for all the photos that follow: In this picture, the handlebar is, just like it says, 4.5cm higher than the saddle. It's an exceedingly comfortable setup, but hard to achieve on most bikes, most of the time.

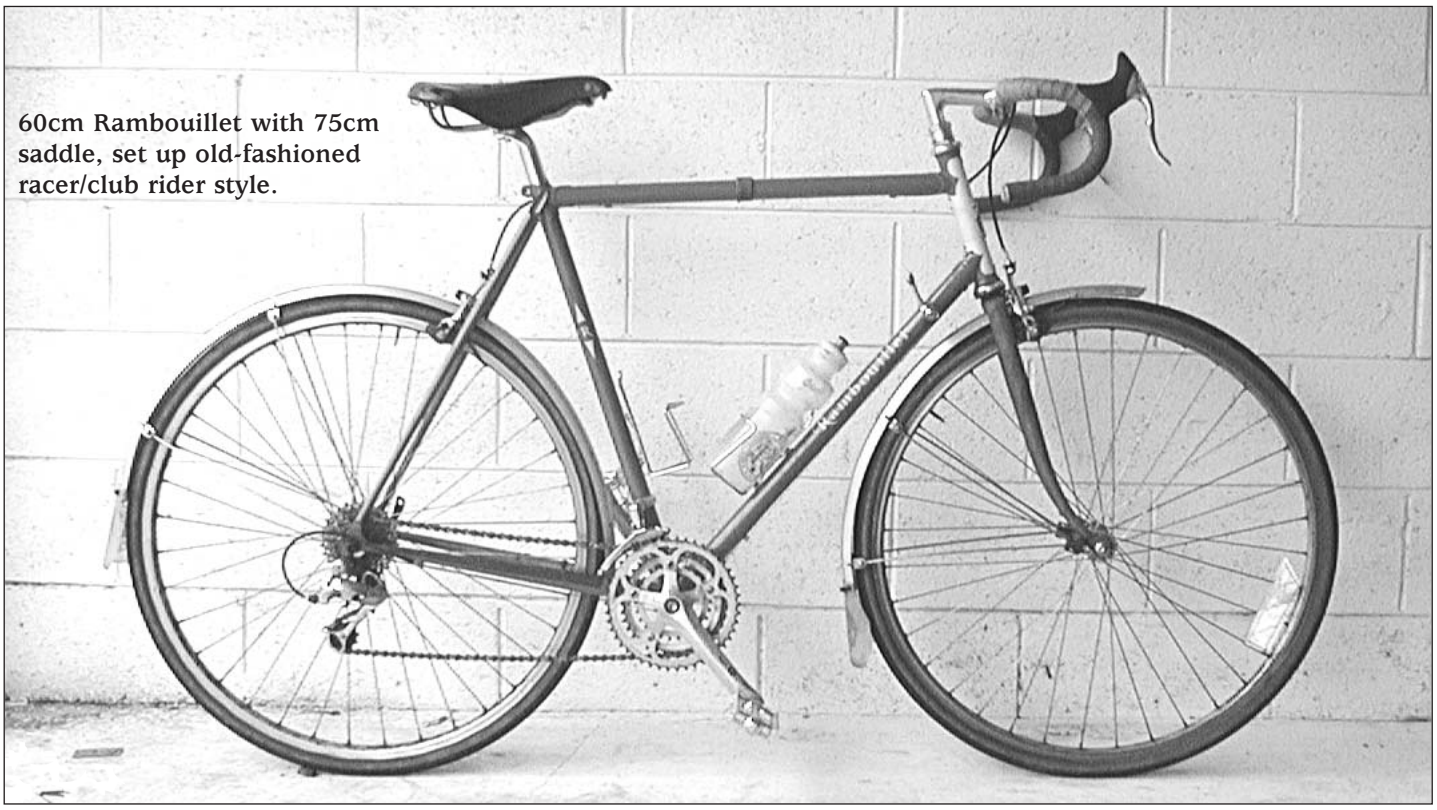
Now on this bike, the bars and saddle are at the same height, and the nose-to-bar distance is 53.5cm. This information is shown above for the benefit of Those Who Don't Read Captions.

As you lower the handlebar, it moves away from you. Compared to the top photo, this bar moved 2.54cm down (an inch) and got a centimeter further away. The bars here are still higher than is common on most bikes.



Here's a 60cm Fuji with features typical of modern-age road bikes—no head tube extension, level-ish top tubes (yes, we know the latest rage is sloping tubes, but historically, most road bikes had level ones), and no extended steerer. The 51.8cm saddle nose-to-bar distance is a reference only, to be compared with the nose-to-bar distance on the same bike below, with lower bars. Obviously the top tube hasn't changed, and we assure you we didn't move the saddle or swap stems; and yet there's a 2.4cm difference. (Does a new modern road bike have a fork rake that nice? And chromed tips, and lugs, and a painted head tube? This model wasn't even special.)

By doing nothing more than lowering the handlebars, the distance from the saddle's nose to the top-center of the handlebar grew by 2.4cm—just under an inch. Also, with this set-up, your arms are effectively shorter, so it feels even longer. By modern standards, this isn't even extreme—ads and catalogues regularly show bikes with even lower bars, conveying the message that it's right. It may be fine for a track rider, but not for a road rider.

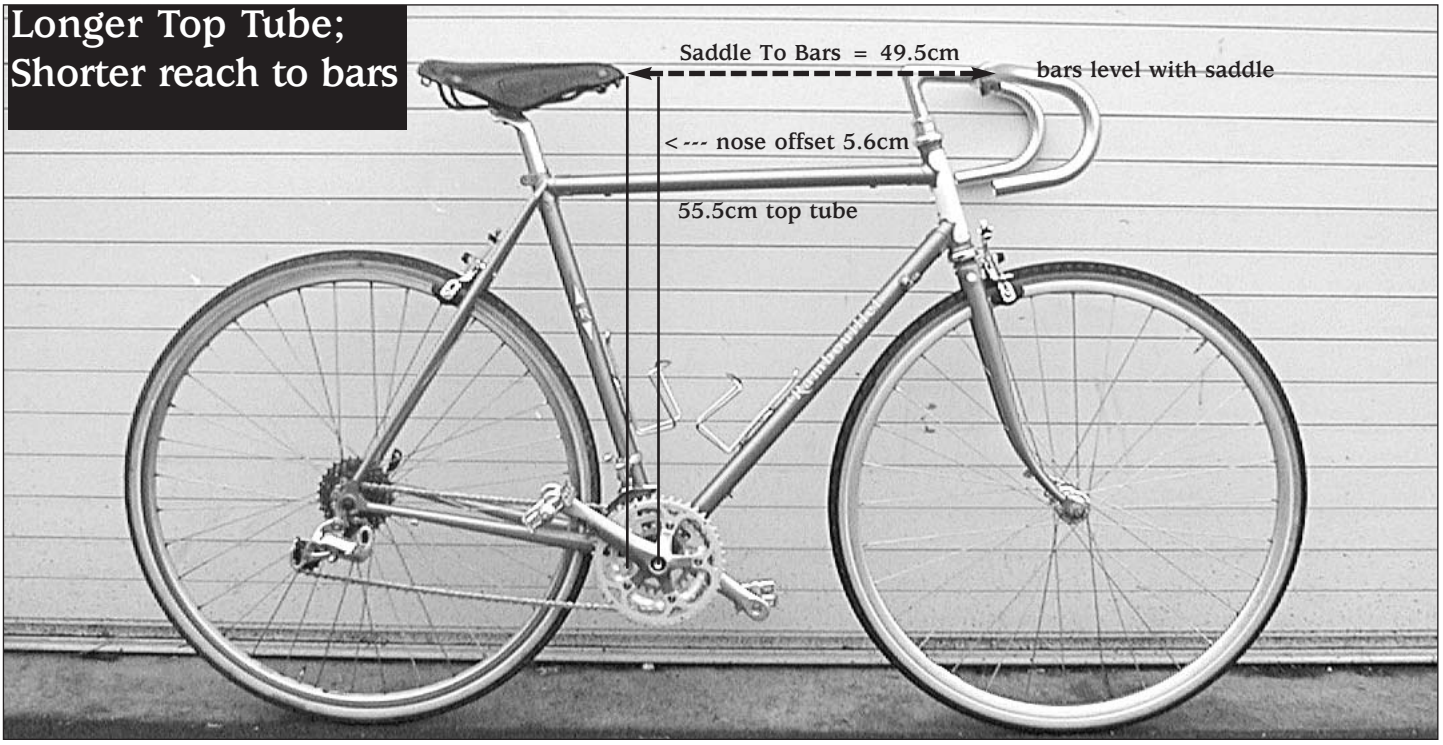


60cm Rambouillet with 75cm saddle, set up old-fashioned racer/club rider style.

This is how most bikes were set up in the early 1970s and before. There's room to raise the bars for longer rides, touring, trails, or a change of pace. Noted French illustrator and cyclist, Daniel Rebour, suggested getting a frame sized 25cm less than your pubic bone height. This saddle is 75cm above the crank center, so the hypothetical rider's pubic bone height would be 85cm. Minus 25 from that is 60—this frame size.

Our 60cm Ramboiullet with saddle at 81.5cm above the bottom bracket. Thank goodness for the Technomic Deluxe stem.

Saddle height 81.5cm, frame 60cm. Two possible explanations for this one. If it were a normal (not Riv-Atl-Ram) bike, we'd shriek, "Too small!" because the bars would max out at about 9cm (3.5-inches) below the saddle (that assumes a level top tube, no cast-extension on the head lug, no extended steer, and a normal stem with a 135mm quill. But on a Riv-designed bike, we'd think, "Hmm…the guy liked the lugs and clearance and functional details of the frame, but couldn't handle the idea of getting a 64cm bike, so he got a 60 instead, and…that's fine, but he should have gotten a bigger bike."



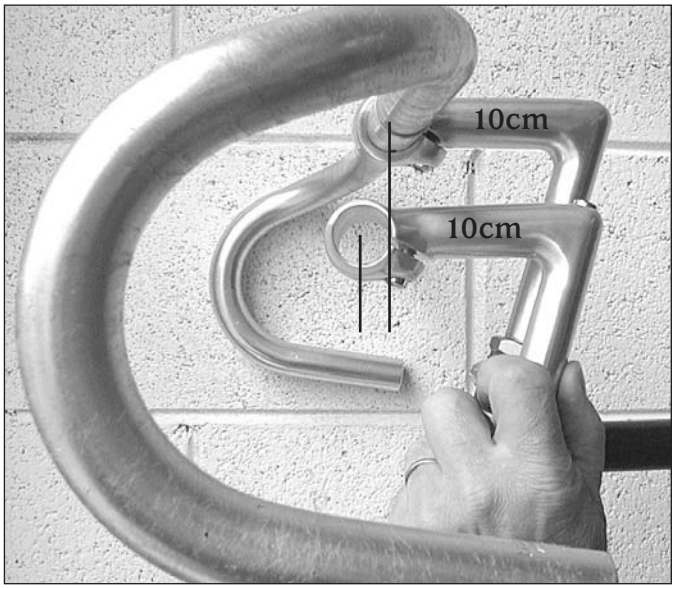
Pay careful attention here, especially if you haven't quite got it yet. The bike up top is a supermodified 53cm Bstone. The one below it is a 54cm Rambouillet. Both bikes have the same saddle height. The saddle fore/aft is the same. Both stems are 11cm. The top tube on the top bike is 1cm shorter than it is on the bottom bike, but the reach to the bars is 2.5cm (a whole inch) greater. If we've done a decent job with this story so far, you'll understand why. This is another example of how higher bars shorten reach, and why concern over a frame's top tube length is wasted, unless all the other factors that affect reach-to-da-bars are considered simultaneously. If you've understood everything here, then—for what it's worth—you know more about the effect of handlebar height on reach-to-the-bars than do ninety-nine percent of all bike designers, makers, and sellers.

Praising Stems You Can Raise & Lower

A stem you can raise and lower will save you time and money, and will minimize discomfort and frustration as you search for your best, most comfortable handlebar height. Such stems are becoming increasingly hard to find these days.

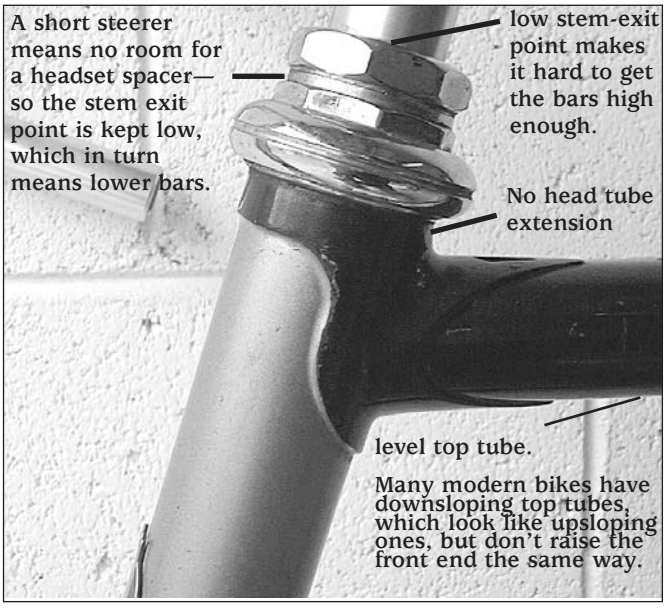
Proponents of bolt-on stems talk about theoretical mechanical advantages of clamping the stem directly to the steer tube. We've read that it's a better connection that promotes more positive bike control. It's not so. That would be true only if conventional stems slipped around in the steerer. The "internal grip" of a standard stem doesn't allow slipping, and the forces on the stem and steer tube connection, even during the most vigorous riding, are minimal.

It's important to be able to raise and lower the handlebar to find a comfortable spot. You might want to change bar height according to how stiff you feel that day, how long you plan to ride, the type of ride, or anything else that may vary from day to day. We're not suggesting you change bar height all the time; just that being able to may come in handy. It's never a *bad* thing.

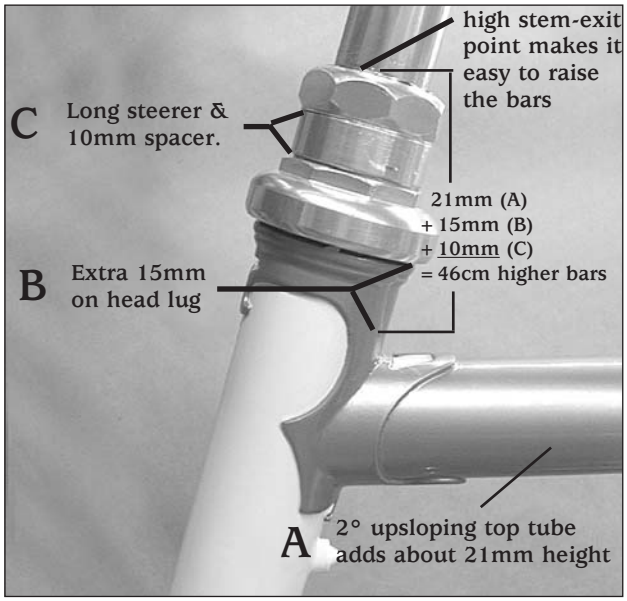


This shows the height difference between a normal stem with a 135mm quill, and a Nitto Technomic Deluxe stem ith a 190mm quill. And, since both stems are the same length, it also shows how, as you raise the stem, the bars retreat toward you (and as you lower them, they move forward). If you now ride a 9cm stem that's much lower than your saddle, you might like a 10 or 11 when you raise it.

Understand the two photos below and you'll know more than 98 percent of all riders and bike industry folks do about this important part of the bicycle.



Normal headset stack and steer tube length. (The steer tube is the thing the stem quill sticks into. It fits inside the head tube, and the headset attaches to it, which is why you can't actually see it here.)



A, B, and C show three details of our frames that significantly raise the stem exit point. Generally, that means higher bars, and a more comfortable position. We didn't invent the head tube extension, but have helped popularize it. These are unpatented details that should come stock on all road frames. And, it's starting to happen.

Do's and Don'ts for Early-Season Riding

by Ed Pavelka and Fred Matheny

During a cold, dark winter, we long for spring and can't wait to get on the bike. Then we promptly overdo it, get injured and can't ride just when spring's bluebird days return. But it's easy to regain last year's cycling enjoyment—and fitness—by following a few simple guidelines:

Things to Do

1. Get motivated with one or two achievable goals.

Goals give direction to riding. But many recreational riders associate goals with racing, suffering and steely-eyed determination. Everything from: "I'm going to win the Tour de France!" to "I'm going to beat my buddy up the hill if it's the last thing I do!"

Goals don't need to be so grimly serious to motivate and inspire. Here are some examples that'll get the season going safely and sanely:

I'll ride my bike at least three times a week.

I'll ride at least two hours each weekend.

I'll do errands on my bike starting in May.

When you've set goals appropriate to your riding style and available time, figure out how to reach them. It may be as simple as getting up earlier or as complicated as designing a training program.

Simply having a goal is a powerful motivator. In addition, tell friends, family or riding companions about your resolve. Once it's public, you'll be less likely to wimp out.

2. Do build mileage gradually.

In the spring, it's tempting to indulge in longer rides when the weather is good. After a week of rain, you'll be lusting to get on the bike. As a result, sunny Sundays are generally followed by exercise-hangover Mondays—tender knees, saddle soreness and reduced enthusiasm.

Here's a proven rule: Increase mileage no more than 10 percent per week. If you ride 70 miles this week, inch up to about 77 miles next week, 85 the week after that, and so on until you're riding as much as you like. Of course, things can happen to mess up this nice progression—say, the group decides to ride an extra 20 minutes to that fabled small-town bakery—but stick to it as best you can.

Occasional rides longer than planned aren't a big problem. But should your mileage go way past the 10 percent recommendation, ease back the following week to let your body recover from your irrational exuberance.

3. Do keep your knees covered.

Here's a second smart rule: Don't ride in bare legs till the temperature is above 65 degrees. Knees exposed to cool air can develop various problems, all of which cause pain when pedaling and could lead to a season-altering injury.

Leg warmers are ideal for spring rides. You can wear them when a ride starts or ends in chilly air, or easily stow them in your jersey pocket or seat bag if the temperature rises.

4. Do spin easily in moderate gears.

You've probably heard this advice before, but it's worth a reminder because overgearing is a leading cause of knee problems. Choose a gear that allows a cadence of at least 85 rpm on the flats, no less than 75 on seated climbs, and 70 when you're standing.

If you can't manage these climbing cadences because your gears aren't low enough, think seriously about upgrading your bike with a triple crankset. Consider it health insurance for your knees.

5. Do ride with others—sometimes.

Group rides are part of cycling's allure. If you want to meet people, learn to ride in a paceline or chat to help the miles fly by, find a compatible group.

But cycling is a solitary sport, too. Advantages to going alone:

It saves time—no waiting for the inevitable late rider.

You can daydream—and often the best ideas come while spinning along, mind wandering.

You can go at your own pace, suitable for your goals that day.

A lone rider takes up less road, reducing the risk of conflicts with drivers.

6. Do use your bike for daily life.

Most people can't imagine going anywhere without driving. But cycling is an easy, efficient, low-cost way to run errands or commute to work. It makes short trips a lot more fun, too.

You don't need to wear cycling duds for rides of a couple miles. Casual clothes work fine. So do street shoes if you have traditional pedals with toe clips and straps. Add a rack and panniers (or a trailer) and you can tote a substantial load.

Things Not to Do

1. Don't lose your perspective.

You have all season to improve, to have fun and to meet your goals. Don't try to accomplish everything on the first warm weekends.

2. Don't get locked into one type—or speed—of riding.

Ride to work, ride with a group, ride on the road or on trails. Seek out flat terrain to cruise and tough hills for their challenge. Ride till noon or on 10-minute errands. Variety keeps you eager for the bike.

3. Don't ride only one bike.

Everyone with at least two different kinds of bikes will tell you the same thing: Variety keeps cycling interesting. You're more likely to ride when you have bikes that expand the possibilities:

A road bike for group rides and touring.

A town bike for errands and commuting.

A mountain bike for dirt roads and trails.

A tandem so you can team with a partner.

4. Don't fail to take days off.

Daily riding doesn't always lead to better fitness. Your body adapts to exercise when it's resting, not working. Especially in the spring as you're building mileage, take at least one day off each week. Two may be better. The rest helps your legs recover and makes you more eager for the next ride.

5. Don't cut calories when you increase your mileage.

One of cycling's great pleasures is how much you can eat without gaining weight, even when riding only moderate mileage. But if you want to lose a few pounds gained during winter, don't cut calories at the same time you're increasing mileage. Your body needs fuel. Feed it or you'll become fatigued, not just lighter.

6. Don't let bad weather stop you.

In some spring climates, rain will be pelting the pavement just when you're fired up about riding more. Use these tips to prevail over precipitation:

Get the right clothes. With a rain jacket, shoe covers, clear lenses for eyewear, water-repellent gloves and a warm wool base layer you can ride in nearly all conditions.

Put fenders on your bike. Fenders are the best rain-riding investment there is, period. They keep gritty road water from spraying you and your bike.

Develop a Belgian's attitude. Belgian racers are famous for riding in Europe's worst spring weather. They take pride in handling rain and sleet. Be a Belgian!

Learn to clean your bike quickly. Some people won't ride if it's wet because they don't want to sully their snazzy bike. Bikes can handle it. To clean up, just dry off the wet frame and components with an old towel and lube the chain. In less than five minutes, the bike will be clean.

(Fred Matheny is the former fitness/training editor of Bicycling magazine. He now writes books, "how to" articles and the popular Ask Coach Fred column for www.RoadBikeRider.com. Sign up on the website to receive a free eBook, "29 Pro Cycling Secrets for Roadies," and a free weekly newsletter full of road riding tips.)

HERONS REHATCHED

same hen, new farmer

Ancient *Reader* readers and long-time members know that we designed and sold Heron lugged steel road and touring frames for several years, ending about 2 years ago. We replaced the Road model with the Rambouillet, and the Touring with the Atlantis. Former Heron owner (the company and a bike, of course) and Rivendell member Ted Durant recently sold Heron to Rivendell member Todd Kuzma, who owns Tullio's Big Dog Cyclery; and to make a long story short, Herons are back in production and still being made by Waterford.

The more I say about this, the greater the chances for error, but from what I've seen, you can now get Herons in a really nice red or green; and for those of you who feel most comfortable straddling two planets, you can also get one with a carbon fiber fork. Although we're now semi-officially competing with Herons, we wish them, Wford, and Todd only good. It's a terrific lugged steelframe, and we're rooting them on! For more information: **www.heroncycles.com**

Stuff That Happened and Things We Saw…

Bhima and I went to the Taipei Bike Show where most of the world's bike part makers, and all of the big ones, show their goods to prospective customers, in hopes of getting orders for the next model year. We're only small, so we used the show as a meeting venue mostly. Toyo, Tange-Sekei, Nitto, Reynolds, Panaracer, and Sugino were there. We also visited Long Shen, our lug & crown caster, about 50 miles away. They didn't show at the show, since as you may have noticed, there's not a lot of lugs around anymore.

Every year at the Taipei show there seems to be a theme, or a fad. Two years ago it was scooters. Last year it was new materials (Carbon Fiber and magnesium) and folding bikes—especially the folders. This year's theme was "Let's all of us here in Taiwan get our high tech act together, because we're losing customers fast as pie to China, and they over there aren't even thinking about high tech, they're just busy building tons of inexpensive bikes. We can't compete with their labor prices, so we have to make stuff they can't make. And, for crying out loud, don't make crummy stuff, because our entire industry's reputation is on the line, and our survival depends on our customers associating Taiwan with high quality." It makes perfect sense. For those of us who grew up in America, it's hard to think of Taiwan and High Quality in the same sentence, but Taiwan's been improving every year since about 1987, when there was the exodus from Japan, and now, 15 years later, the best of the Taiwan makers have long gotten the bugs out. You'd be hard put to tell a Taiwan tig-weld from the best American ones. Taiwan makes many of the Italian framesets, and they're no doubt every bit as good as the Italian ones; often better. The best lugs we've seen come from Taiwan. Japan has the edge in components, but isn't a factor any more, because of the prices.

Top: an LED bar plug. Bottom: a reflector one. We'll probably stock both of these later this Summer; certainly by Fall.

We found a couple of neat bar plugs. One is a reflector, the other, an LED. They don't have the cachet of a Velox plug, but they're cute, light, and clever, and I like them a lot.We saw two lugged frames. One was a 12-year old Giant in the Giant booth. It was used as an historical prop to show how far they've come. The other was a frame made with Long Shen's 302 series of lugs, which we showed in RR25. It was made by a company called Forever, who reportedly makes lugged frames for some quite famous brands.

We met with a dropout maker, Liow Ko. LK makes all of our front dropouts, and all the rears for Rambouillet and Atlantis frames, and the verticals for Rivendells. An American works there, so we spoke to him. He talked about how things have changed so much in the dropout business. Although he hadn't been working there long, he's been living in Taiwan for a while, speaks the language, and knows his company's history well. He said that in the old days ending about 4 years ago, their customers picked dropouts from the catalogue, and ordered them 10,000 pair at a time, and life was good. Now, not many people are using forged steel dropouts, but they forge other small parts too. LK does 80 percent of its bike business with 3 big companies; but spends 80 percent of its time dealing with small companies (ulp!). He also noted that they make two or three of the parts in the new iMac, and that was good business. We were there hoping to get our own dropout made, but went away embarassed to ask for it. That's okay.

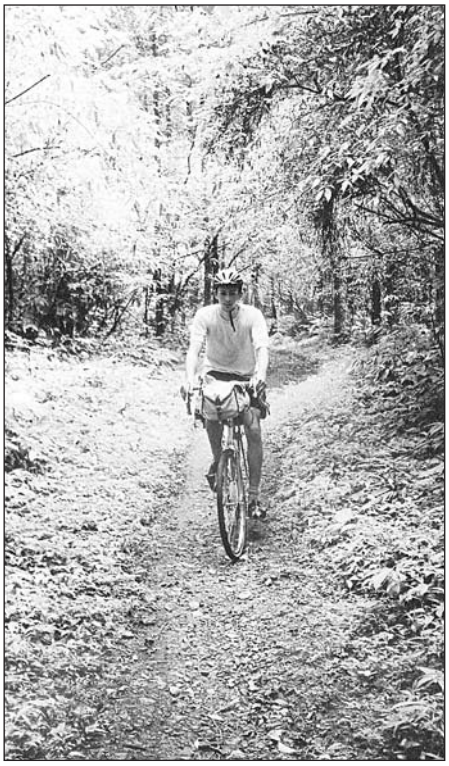
Guess what else we found? A leather saddle maker! It was a shock to see animal hide bike parts in such a coliseum of glitz, but there they were, so we sat down, fondled, gawked, and with the help of our friend and translator Christine, we chatted. The company's name is Tops, and the owner has been making leather saddles for 40 years. Before you shout, "Brooks has been at it longer than that, and you'd better not be a traitor!" consider the danger of having only one leather saddle maker in the world.

A Tops leather saddle. No rookie, the company that makes these has been at it for more than 40 years, and shipped more than 4 million of them worldwide during the '70s and '80s. Several styles available.

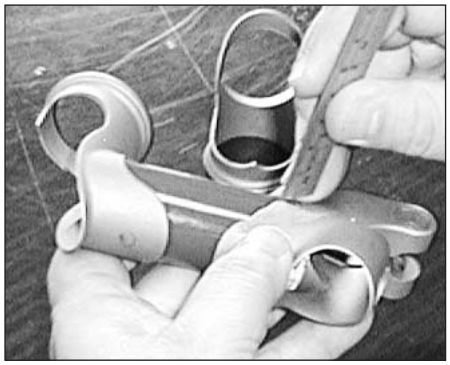
...Last Month In Taipei

Many of you will remember last year, or maybe it was two years ago, when Brooks closed down for several months, only to be saved at the last minute. We're not disloyal to Brooks, but we'll investigate Tops.

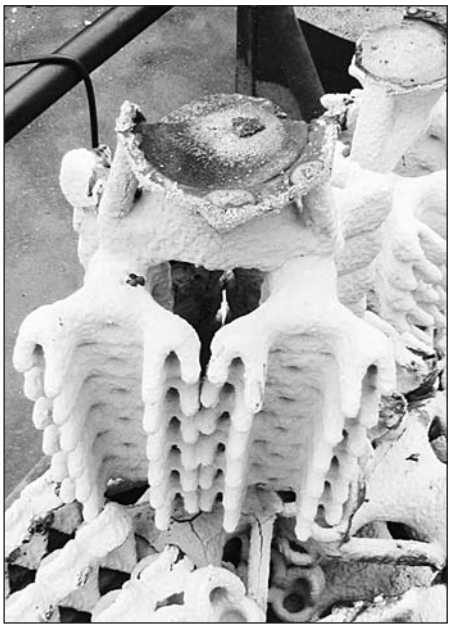
Christine Wu (left) explains our lug modifications to Alan and Shirley Kerr, owners of Long Shen. We got sample lugs that didn't come out just the way we wanted, but really close. We explained in detail what we wanted to Christine, and she passed it on to Alan and Shirley. The lugs that result are always the result of a collaborative effort, and we've been lucky to have such good friends and suppliers. Long Shen likes lugs as much as we do, is NOT in it just because it's a viable business, but actually gets excited about lugs.



Bhima on his prototype 68cm Rambouillet, with sidepulls and 700x37 tires. A Boxy bag up front and a Camper Longflap in back carried all he needed for this tour—including a 2-person tent, sleeping bag, pad, food, and extras. Touring in snake heaven.



Sneak look at secret lugs for a future bike. Here, Alan Kerr is using clay to reshape the curves to our spec. These samples look good, but we want them to be perfect, so...that's what he's doing. They're going to be neat!

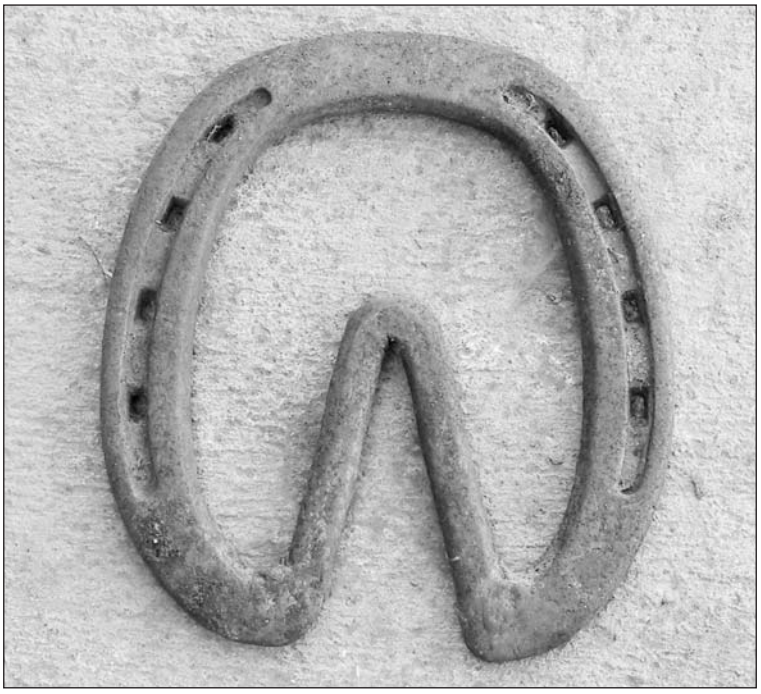


A "tree" of batter-dipped castings. In the last issue we talked about this, but in case you missed it: You make a mold from wax. You make a "tree" of them, so you can do more than one at a time. You dip the tree in ceramic batter until a thick crust forms. You put it into an oven and melt the wax out. The batter stays. You pour molten metal into the tree molds. After it cools, you break off the batter and get your castings.

It's not a stick and it's not a snake (so relax). It's only a worm, presumably a typical one from the high mountain forests of Taiwan. That's Rambouillet rider Shawn Nagel's foot there, for scale. This photo was taken on Bhima and Shawn's 5-day tour after the Taipei bike snow. Snakes are big in Taiwan, too, and Shawn's shown us photos of 5-foot long snakes that are nearly 4-inches thick—right on or near the roads and trails. There's nothing wrong with that, but if snakes give you the creeps, Taiwan's not the ideal community for you, maybe.

Horseshoes

by Jeff Mathews



Hard to get a ringer with this one, but it's just what the farrier ordered for a horse with laminitis—inflamed live tissue inside the hoof wall. To get an idea of how it feels to the horse, hit your thumbnail with a hammer.

Grant asked me the other day, "Which way are you supposed to hang a horseshoe for good luck?"* Since I know a little about horses and horseshoes, I guess that makes me a logical expert. It's a question that has been around almost as long as the shoes themselves, about 2,000 years. Some things, like legends, are so lost in the past that nobody is quite sure where they began. We do know that ancient Romans were nailing iron to horses' feet; the shoes have turned up in Roman ruins in Britain, crude in appearance, but every bit as recognizable as a modern shoe.

The myths and legends had to have started soon after the first shoes got nailed on, it only stands to reason, when most peoples' lives were ruled by superstitions and trade guilds were highly secretive groups. The ability to give a horse feet of iron could mean whinnying or losing kingdoms, and blacksmiths were often directly associated with demons or deities. We don't do anything like that today…or do we?

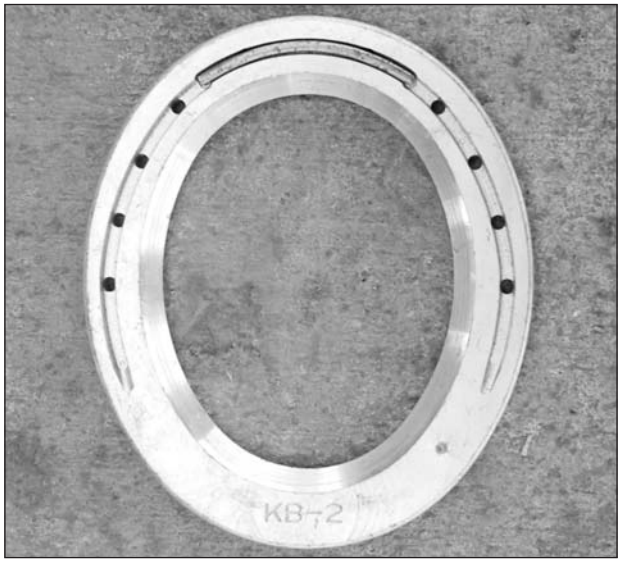
Horses are still with us, and they still get shoes put on, for the same reasons they always have: To protect their feet and to give them traction. It's easy to imagine that it's a technology we'd have pretty much mastered by now, but that's not the case, any more than modern technology can let anybody be a photographer. It's one thing to learn about optics, lighting, and composition, say, but it's quite another to be a real artist with all the handy tools available. People who call Grant "retro" or "Luddite" are probably the same ones who don't know that modern horseshoers (if not modern small bike business owners—ed.) are making six-figure incomes and have clients willing to jet them all over the country. The one question I always get asked about my work is, "Do you ever get kicked?" Like photography, farrier science has not been left behind by modern technology. Also like photography, the basic principle—in this case, to secure a piece of metal to a horse's foot—remains the same.

It's said that 90 percent of what we know today about horseshoeing, we knew by the end of the 1800s. What's amazing is that medieval blacksmiths already knew most of this, too: How to proportion a shoe, make it fit the foot, where to set the nail holes and how to get a secure nailing. Who knew, at the beginning, to nail only from either side of the toe back to only the widest part of the foot? Such knowledge requires a minute understanding of the anatomy of the foot, something we feel we're only today getting a grip on, yet no examples of ancient horseshoes fail to follow the patterns we use now. Look at display shoes from a hundred years ago and you'll wonder if we haven't forgotten more than we learned.

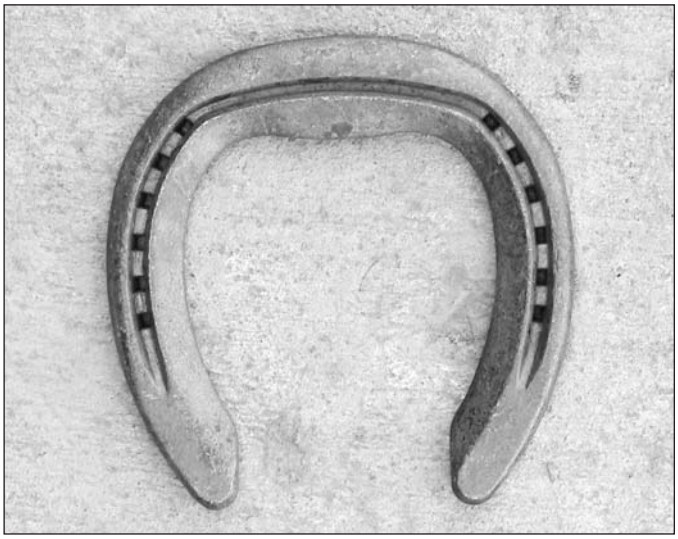
My hobbies weren't satisfying enough. Everything is becoming too modern for me, and I wanted something traditional—jine the Cavalry! *(no typo there-GP)* Civil War reenacting is a big industry these days, just look at the 30,000-plus who participated at the 135th at Gettysburg. I was there. These people are devoted historians, and many ask the same questions I do: How did we shoe horses during the War? Over a million and a half horses and mules served in the opposing armies, none as volunteers, and all had to be shod. I've heard a pretty good blacksmith can make a simple pair of shoes in 15 minutes; I'm not one of them. If you figure just one cavalry brigade might have anywhere from 500 to maybe 2,500 horses, multiply by four the time it takes to hammer out a shoe, consider that each shoe weighs from 12 to 16 ounces—how much ironwork are you doing?

Wait, you're not done. When the brigade comes back from a march, a lot of those shoes will be missing, sucked off in the ever-present mud or stepped off by other horses. Typical Army routine called for shoeing at four-week intervals, but in reality, most of the farrier's work consisted of replacing lost shoes, what we call "repairs." The lucky horseshoe is the one that stays on, and we can probably forgive the man who let his horse's shoes wear out.

***Actually, that's not exactly how it happened. We have a horseshoe above the door, and I pointed it out to Jeff, and it was "heels up," and he said, "It's pointing the wrong way."—Grant**



An "egg-bar" shoe for added heel support, especially helpful on soft or spongy ground. This one is machined aluminum, with a steel toe insert up there at 12:00.

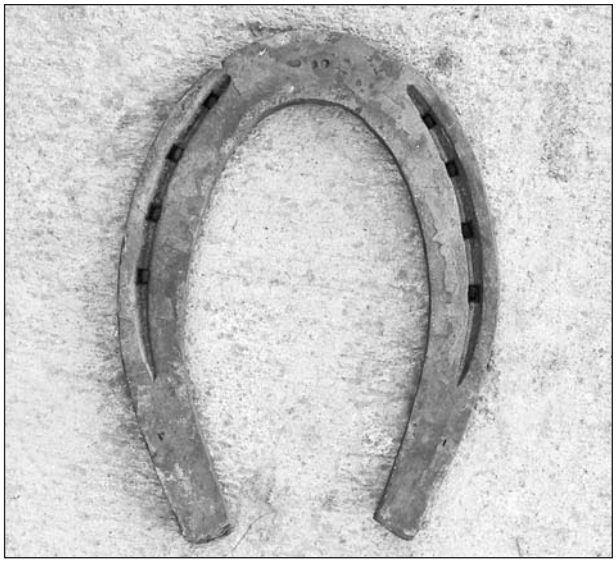


Recently developed "Natural Balance" shoe. Used as is or with a patented therapeutic system. This one is steel; aluminum also available. The extra nail holes aren't for more nails, but more nail positions.

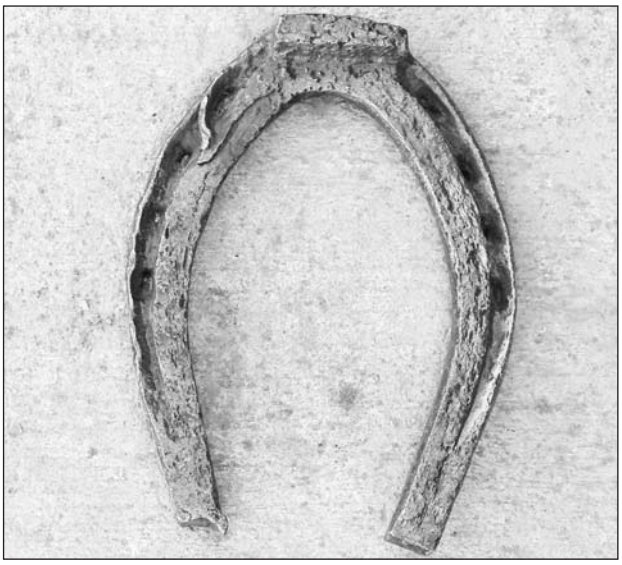
How long can a set last? Maybe a hundred miles or so. Many marches and raids traveled much farther than that, though, and every soldier tried to carry an extra pair of shoes already fitted for his horse, plus nails. The first order of business after a long march was to have all the surviving horses re-shod. The Union armies had a big advantage in that northern factories could make shoes with machines. Southern blacksmiths had to hammer out their own by hand, one by one. Capture of U.S. horseshoes was a priority just behind weapons and ammunition. U.S. issue horseshoes came in four sizes: One size for heavy horses, three for saddle horses, none were large by today's standards. These came in front and hind patterns, in standard weights; shipped in wooden kegs, they were called "keg shoes." Today's "keg shoe" is no longer a front or hind shape, it has the familiar elliptical shape most of us think of. Shoes were issued with the heels left long and unfinished; the smith or farrier would shape and cut them to the length for the individual foot, leaving a little extra to turn under for heel calks. Heel calks were always used and hind shoes added a toe calk. The style of the time called for the heels to be pinched, causing the shoe to have a thin wedge-shaped profile seen from the side. I've heard this called a "Phoenix" shoe, for a highly mass-produced item from turn of the twentieth century. In fact, this style was around long before Phoenix began making them. And other companies made them, too. These didn't completely disappear until well into the 1900s. Today's shoes are almost all flat in profile, 5/16" thick and 3/4" x 7/8" wide. When I counterfeit period-style shoes, I like to use 3/4" to 3/8" bar stock: I don't know if this was a preferred size, but it gives plausible results and it's easy to get. Period shoes have another distinct feature, nail holes only punch 1/4-inch from the edge of the shoe. No modern shoes are punched in this "fine" for normal pleasure riding, 3/8-inch to 7/16-inch is more like it. I've heard complaints that today's horses are losing the wall thickness in their feet from the over-breeding, but looking at old shoes makes that hard to believe. When we drive a nail into a foot, we aim for the soft backside of the hard outer wall. Driving nails to "fine" will split the outer wall, especially since it takes heavier nails to penetrate. Yesterday's shoes were designed for yesterday's horses. According to the turn-of-the-century writer, Geoerge Rich, *(no typo again-GP)* Hambletonian trotters, which were Standardbreds, had the very thinnest walls of any horses he'd seen. Good shoeing was necessarily non-invasive to the foot…Tetanus vaccine hadn't been invented yet, and any nail accidentally driven into the blood could be fatal. Many times the nails were at fault; they had an ugly habit of splitting lengthwise. Capewell nails, still made today, eliminated the problem of splitting.

Part of my curiosity about Civil War-era shoeing demands that I see the actual shoes. But how? Answer: Relic-hunters find those old shoes that got sucked off into the mud and they sell them to us. Harry Ridgeway, of Winchester, Virginia, told about finding so many of these things in the ground that the metal detectors couldn't hear the buttons and buckles and bullets he was really after. He sent me a bunch of the shoes he still had, and they were amazing, no two alike. Some were made from pieces of junk, there were a couple of mule shoes, one with ice-calks like chisels, 3/4-inch long, some machine-made shoes for horses…One shoe was bogus, I made it out to be a fairly modern Amish carriage horse shoe, but it was a type I'd never seen before. All these shoes were small, only one was just over 5-inches wide, where most modern horses take a shoe at least 5 1/4-

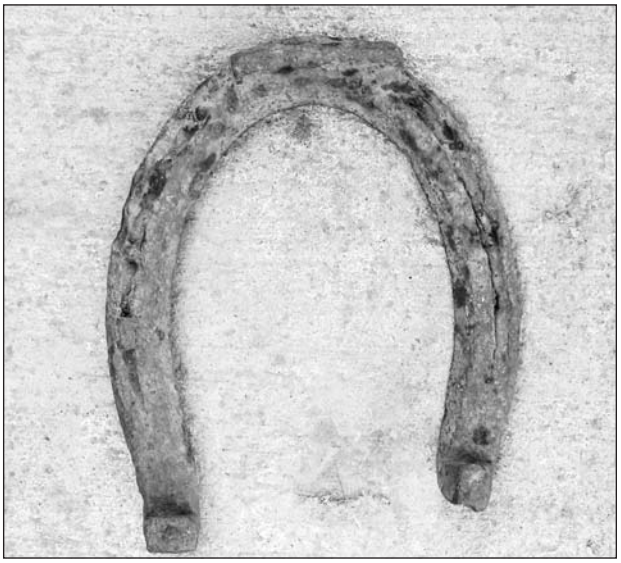
A wide-web shoe called an "Eventer" by the maker (St. Croix), it has a W cross-section with flat heels which can be drilled and tapped for stud calks, just like golf shoes. This round shoe is a front. Hinds are also available.



I tried to copy E (the relic shoe shown below left). I made this from 5/16" x7/8" bar.



A relic shoe from Winchester, VA. This is a hind pattern with a large toe calk and unfinished heels. The blacksmith did a nice job of making this from two pieces, plus calk.

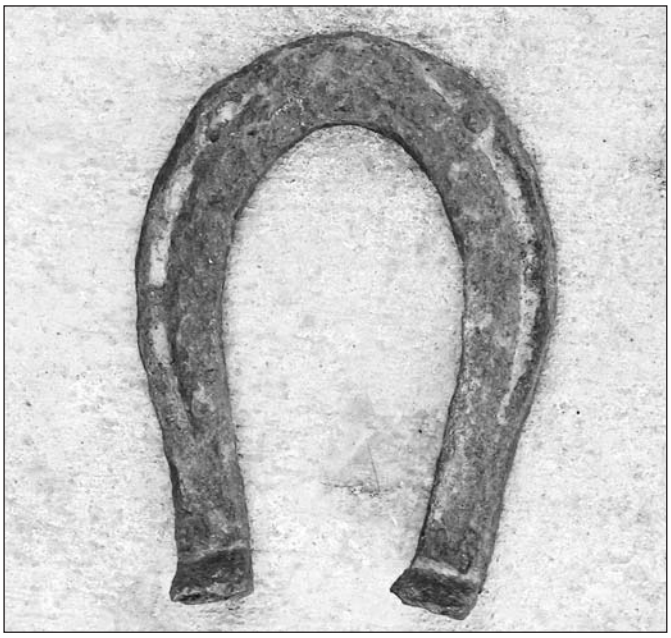


Another relic, fairly lightweight, machine-made. This is a right hind shoe with an outside trailer, plus toe & heel calks.

inches wide, and often wider. Likewise, today's bridle bits are roomier than the 4 3/4-inch that was normal for the 1860s. Saddles are the same, and I tell people to forget trying to use the original period tack on their modern horses.

The Civil War farrier was a master at improvising, and he did his job with a minimal number of tools. A U.S. Army forge wagon carried a standard tool set, which any farrier today could recognize and use with good results. Army buyers were expected to avoid taking animals that would require special shoeing, but such work is what makes a real farrier, instead of being just a horseshoer. Calks, clips, trailers, and bar shoes might seem like specialty work, but any good farrier should be competent at making these. You can buy excellent shoes today with all kinds of features and at good prices, but it's just not the same as when someone is making them the old-fashioned way, one by one, by hand. Today's farriers have a close sentimental attachment to the tradition that they are keeping alive, and it's a poor shoer who doesn't strive to become a true blacksmith as well.

A steel egg-bar I welded up, with hand-forged side clips to help stabilize the shoe.



Mules get shod, too. This mule shoe has dangerous-looking 3/4-inch heel calks to bite into ice.

Random Afterwards:

"Roughshod" means shod for ice: can be with shoes worked to have a grip surface; usually it means oversized, pointed nail heads.

The standard army unit, north and south, was the regiment: 1,000 men for infantry, 1,200 for cavalry. A combination of regiments is a brigade, commanded by a brigadier general. The regiment is commanded by a colonel, and each company of 100 men by a captain. Few units stayed at full strength for long, and many were reduced through service to only a quarter of the men they began with. A cavalry company has two farriers who are soldiers, first. I haven't been able to learn how their duties were assigned, but I want to imagine they were only supplemental to regimental blacksmiths.

Front view of a shoe made to contain a number of requirements for certification by American Farriers Association. This one has: toe clip, rolled toe (looks like a bevel), wedge pad. Unseen: Welded straight bars and holes tapped for stud calks.

A company farrier was usually a corporal or sergeant, making not over $15 a month, whereas the civilian blacksmiths at the Giesboro remount depot were making about $64 per month. North or South, all the blacksmiths must have learned their trade as apprentices. Their styles varied widely and wildly, just as they do today, and it would take many years, and many lost horses, before the Army would begin to teach standardized shoeing methods. These methods with us today.

When you hang up that horseshoe, be sure to put it where it can tell it's story, of the man who made it, the horse who wore it, and the places it went. If you're into symbolism, hang the shoe with the heels up to represent female sexuality, the witch's cauldron, the womb. Devout Christians must have reviled the horse shoe symbol and the pagan legends attached to it. Hanging with the heels up, it stores good luck; hang it heels down to let the luck pour down on your doorway, you desk, your workbench.

According to the American Farrier's Journal, there are 6.9 million horses in the U.S., more than at the start of the Civil War. Their total impact on the U.S. gross domestic product amounts to $112.1 billion. In spite of determined habitat destruction (what I call "Saving the Earth for our children"…not for horses), the horse population continues to increase. One of the remarkable things about the industry is how it is being almost entirely taken over by women. In some ways, this is a good thing: Training and handling are being done with better sensitivity for the horses, which makes my job a lot easier. It's still hazardous work, but most of our injuries are somewhat self-inflicted. Getting kicked is a rarity, but I dread being stepped on; as I write this, I'm nursing an injured toe. Women want to "coddle their babies," which causes a host of problems for an animal that once lived out on the wild steppe, and did just fine, thank you. As we reexamine the horses in the wild, we rediscover our own domestic horse, and we learn more about our own selves in the process.

How To Shoe a Horse

1. Hitch Push. Push is the name of this horse, and he's really friendly.

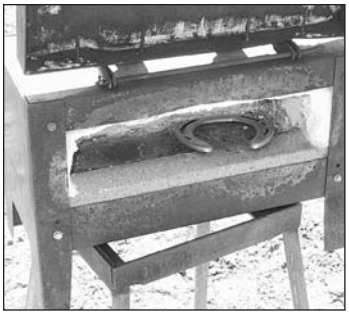
2. Evaluate the foot. There's a big chip, but the overall shape and appearance are still good after seven weeks.

3. Pick out the packed dirt and rocks, and take a good look for injuries.

4. The cleaned-out foot. Do this before every ride, too.

5. Upsetting the nail clinches. In other words, loosening the shoe so you can get more easily get at the nails.

6. Using special pull-off pliers, gently tug the shoe away from the horse's foot.



7. We can use this shoe again, so it gets scrubbed clean with a wire brush, and then into the oven.

8. Upsetting the nail clinches. In other words, loosening the shoe so you can get more easily get at the nails.

9. This chip looks ugly, so let's dress up the whole top of the foot with a rasp before trimming the bottom.

10. Like this. By the way, getting kicked by horses is rare. Getting stepped on is less rare, not that uncommon.

11. Gently loosen the exfoliating sole with old, dull nippers. This smells bad, like horse toe cheese.

12. With a special sole knife, I pare away the sole edge to expose the transition from new hoof wall to old.

13. With nippers, cut away the old hoof material.

14. Use the rasp to smooth the nipper cut and make the foot level .

15. A foot is level when the sole is perpindicular to the bone column, with the bottom of the foot absolutely flat.

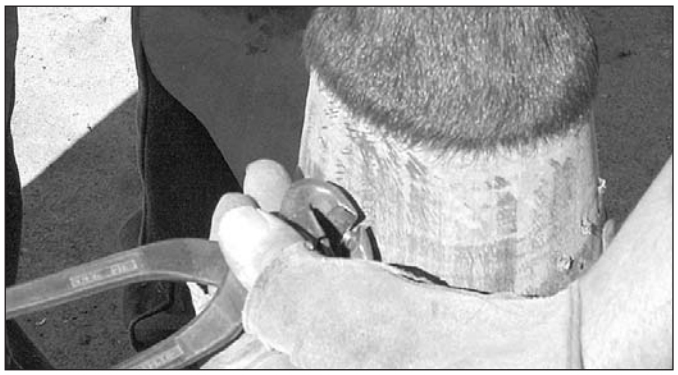
16. Checking the old shoe to see if it still fits. Feet change in shape as they grow through a shoeing cycle.

17. Hot-seating. Put a shoe, hot and fresh from the stove, onto the hoof. It helps with the fit. It doesn't hurt.

18. A perfectly seated shoe leaves no gaps or high spots.

19. Start nailing that shoe in the right position.

20. The nails stick out and need to be clipped off.



21. Clipping the nails with special nippers. Or as some would say, nipping the nails with special clippers.

22. Smearing down the ends of the clipped nails where they stick out the hoof. The finals step, not shown, is filing it smooth so it won't catch on anything. Typically, horses need reshoeing every 6 weeks.

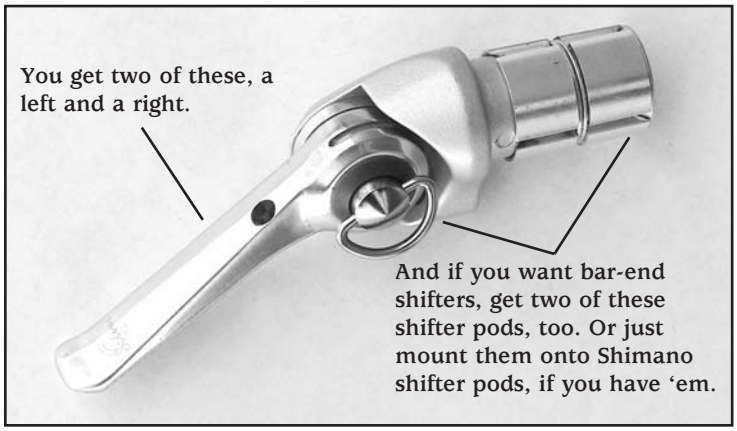
The Silver Shifter is Here*

***provided you're reading this after June 10, and the shipment arrived as expected.**

We ran out of SunTour Sprint downtube shifters, a key ingredient of our favorite all-time bar-end shifter, and a fantastic downtube shifter by itself. We looked all over for someone to make them for us, and finally hooked up with Dia-Compe/Dia-Tech who, with some technical assistance from SunTour (in sourcing) agreed to make them for us. Two years, several prototypes, many emails and drawings and $9,000 later, here it is, the first and maybe the last component in our SILVER line of parts.

The SILVER shifter is a pure knockoff of SunTour's Sprint shifter, not because we're copying scoundrels, but because SunTour isn't making them any more and didn't mind, and it is, honestly, and unimprovable part. The SILVER logo is laser-etched on the lever. Shoulda been engraved, but oh well. The finish is shinier than the Sprint's was (maybe too shiny), and the guts are identical. The first production run is 500 pair, and that makes us happy indeed. There is no better shifter on the market. Try them, and if you don't like them, don't admit it, because there is truly nothing not to like about 'em.

They'll work with any derailleur, chain, freewheel or cassette ever made or likely to be made. Five, six, seven, eight, or nine speeds, no problem. These are it.



Available as a separate set of downtube shifters for those who want downtube shifters or who already have the shifter pods we sell OR Shimano indexable bar-ends (they mount on those as well); or you may buy both the shifters and the mounting pods (shown above). In either case, we sell them by the bikesworth (a pair, not singly as shown).

Silver Shifters, pair: Item no. 17-101; $35

Silver Shifter Pods, pair: Item no. 17-068; $22

Cables & Housing, enough: Item no. 17-102; $10

You probably couldn't find a better bike in 1952 - nor a more expensive one.

Perfection in 1952: Herse Randonneur

by Jan Heine

Among the French *constructeurs,* René Herse stands out. To this date, French cyclotourists call his bikes "La Rolls du vélo" (the Rolls-Royce of bicycles). In the 1930s, Herse worked at the Breguet aviation company. Being an enthusiastic cyclotourist and skilled metalworker, he started making bike parts on the side. In 1939, he opened his shop in Levallois, located less than a mile from the other famous *constructeur,* Alex Singer.

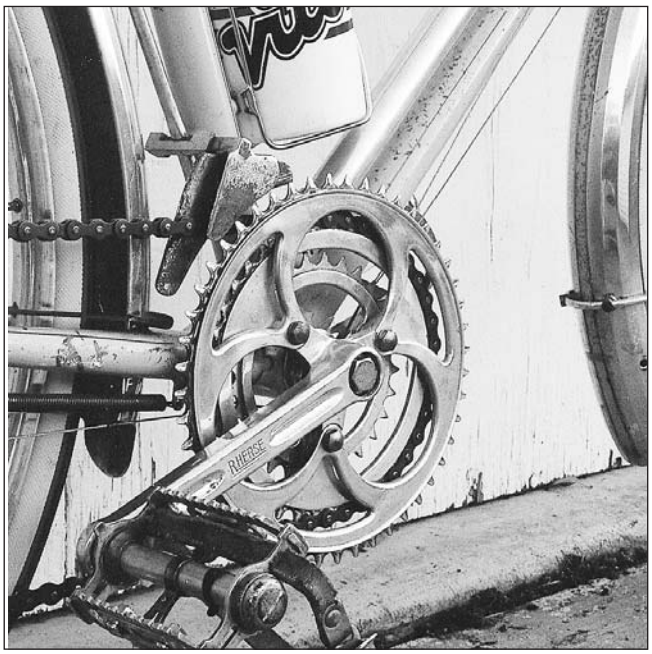
The 60cm bike shown was built in 1952 for an Audax rider. Besides the "allure libre" ("go as fast as you want") Paris-Brest-Paris, there is the "Audax" PBP, a separate, entirely non-competitive event. The goal is to stay with the group over hill and dale while the ride leaders maintain a prescribed average speed. While the faster randonneurs started using 700C tires in the early 1950s, the wide 650B tires are useful when riding in a large group, where potholes often cannot be avoided. Consider that the war had ended only 7 years before this bike was built, and much of the damage remained to be repaired. Furthermore, most streets in French towns were still paved with cobblestones.

The bike is truly special: Herse didn't just make the frame and fork, but also stem, brakes, cranks, bottom bracket, shift lever, front derailleur and rack. The lighting system includes a power pickup in the headset using a carbon brush: The only exposed wire on the entire bike extends about 1" from the generator into the seatstay—all other wires are internal! Contrasting all this special equipment is the Cyclo rear derailleur, which was found on hundreds of thousands of 3-speed utility bikes. This one is a rare aluminum 5-speed version, but functionally, it is the same. Designed in the 1920s as one of the very first derailleurs, it was still state of the art in 1952.

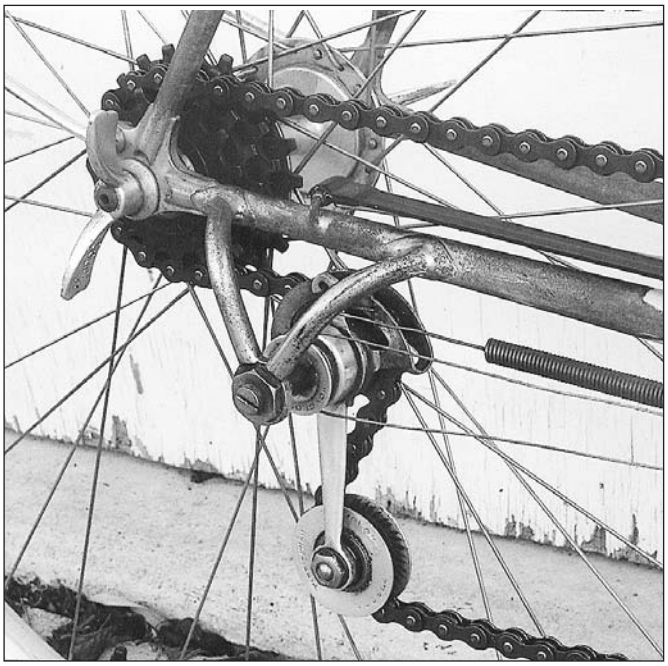
The bike hadn't been ridden in at least 25 years, so I overhauled everything on it. I loved working on the bike—discovering the details of the master's work and figuring out the adjustments of the rear derailleur. I felt as if René Herse was looking over my shoulder. Did he chuckle when I discovered the amazing double-threaded screws that mount the brake arms to their posts, with thinner-diameter forward extensions to fasten the lower rack stays with domed nuts? The quality and careful initial assembly of the bike is amazing. Every screw and bolt came undone easily. The René Herse bottom bracket and the Maxicar hubs spin freely and without play after 50 years and many kilometers without service. The grease inside looks like new—no need to take them apart now. Only a fender screw, the tires and chain needed replacement. The rest of the bike is original, down to the handlebar tape, cables and housing. Only the paint and chrome have suffered from decades in a damp garage, but the tubes underneath are fine.

The bike weighs 23.5lbs, amazingly light for a 60 cm (center-center) steel bike with triple cranks, leather saddle, fenders, lights, rack, pump and even a bell! If you stripped the bike of its randonneuring equipment, you'd get a sub-20 lb. fat-tire racer. But why do that?

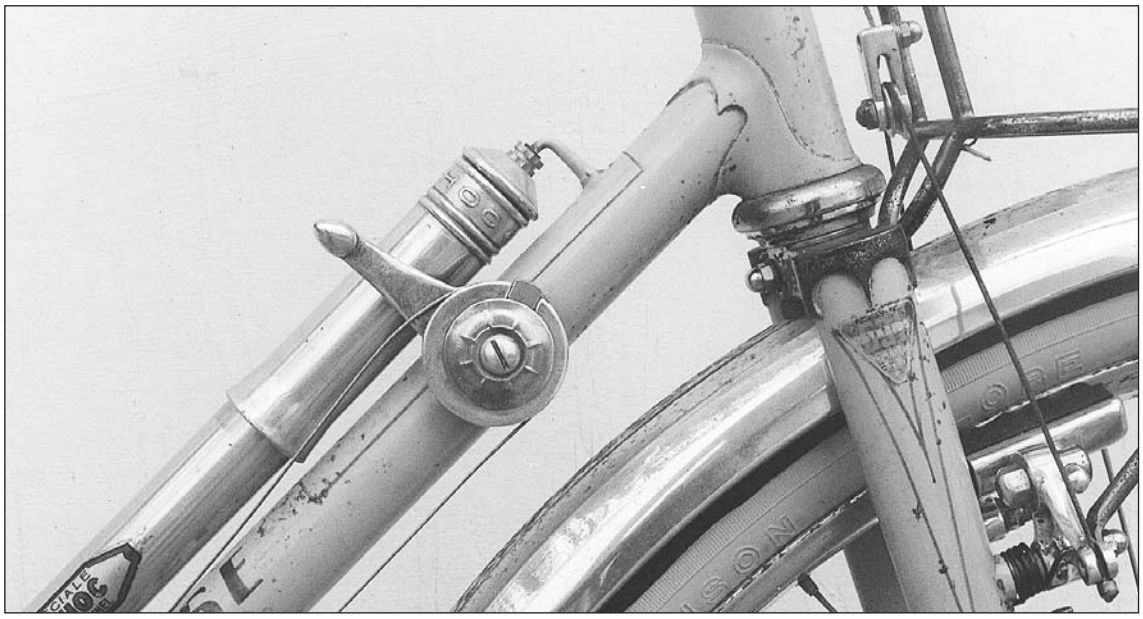
With the overhaul complete, it was time to take the bike for a ride. It is a big bike, riding on huge, 37mm wide



René Herse made his own forged cranks: Easily adapted to one, two or three chainrings, with a very low Q factor, mounted onto a Herse bottom bracket with cartridge bearings. The quest for a low center of gravity is evident in the low BB and the water bottle placement! The Nitto cage isn't correct...



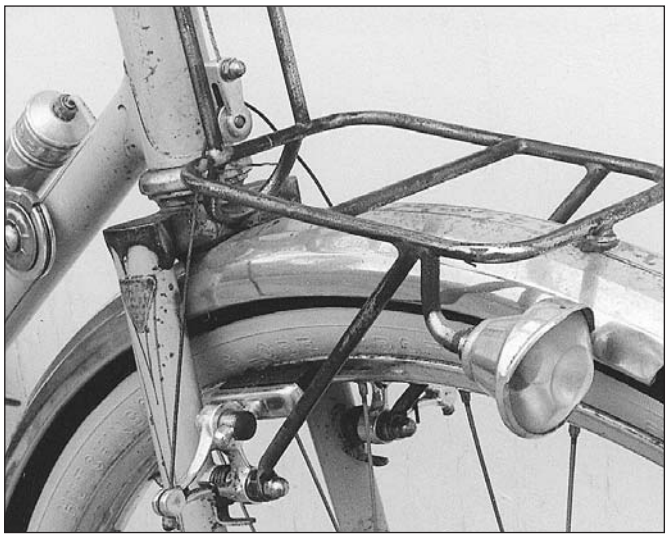
Cyclo rear derailleur: The long spring tensions the chain. The shifter cable loops around the pulley, which has a helical groove on its inside, sliding on a peg fixed on the rod. Turning the pulley moves the derailleur in or out. Vertical dropouts and a chainslap strap were standard on most quality French randonneur bikes.



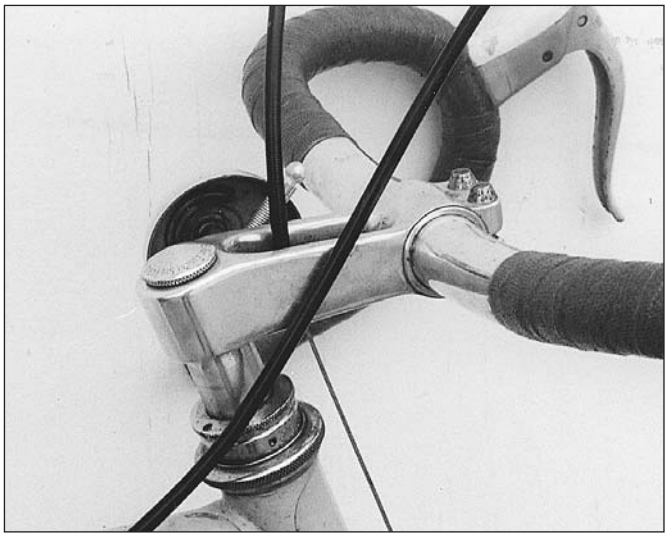
Front end: This photo shows the dual-cable shifter fore the above derailleur, the Ad Hoc brand French pump, mounted on the down-tube, the chromed flat fork crown, an small front handlebar bag support, and the Rene Herse bottom head lug, with details typical of classic French frame lugs.

All bits and accessories mounted easily and gracefully; they were designed and built to do so. Such thoroughly thought-out design won the French touring frame makers, particularly Singer and Herse, the top reputations that today make their bikes so sought after.

"demi ballon" tires. The first thing to figure out was the shifting. It is quite different from modern bikes, but works surprisingly well. The lever for the rear derailleur operates opposite to what has since become standard: To shift onto a smaller cog, you pull the lever toward you. Also, there are no limit screws, but careful setup makes it impossible to shift into the spokes—the length of the rod limits how far inward the derailleur can go. The shifts are fast and accurate. Since there is no return spring and a little slack in the pulley system, once a shift is initiated and the chain catches on the new cog, the derailleur can move on its own to complete the shift. As a result, you rarely overshift. As Shimano discovered when they introduced indexed shifting, a little slack on an early-shifting derailleur is a good thing. (They created a floating upper pulley.) However, when a downshift follows an upshift (or vice versa), the cable slack needs to be considered. Without the Herse eccentric shift lever, the cable slack would increase as the derailleur moves inward, making the whole shifting process a lot less predictable. An advantage of a spring-less system becomes apparent if the cable breaks: Without a spring to move the derailleur, it stays on the cog where you place it. You'll never "auto-shift" because your shift lever slips.



The rack for the handlebar bag mounts onto the brake posts with special screws. The superlight JOS lights are press-fit onto the posts - light bulbs can be replaced on the road without tools. Herse cantilever brakes are forged and super-light. The tabs under the brakes prevent the arms from hitting the spokes if a straddle cable fails.



The forged and machined René Herse stem: Elegant and light, it incorporates the mandatory bell. The cap that hides the expander bolt is engraved with the original owner's name and address. Cable routing through the top tube has been an Herse feature since the early days.

The front derailleur looks crude by modern standards, but its function is amazing. For both up- and downshifts, you simply tap the lever, and the gear engages immediately. With no springs, the derailleur is free to float, so you don't need to trim it when making shifts on the rear. The chain pushes it out of the way.

The brakes are as powerful as any good cantilever, operated by sturdy Mafac levers with built-in barrel adjusters. The 165 mm cranks were common at the time. Combined with short gearing (the largest gear is 48-15), the rider can spin the smallish gears for days on end.

But forget all its impressive specification and craftsmanship: The ride is outstanding. It corners with precision and stability, going exactly where I point it. Unfortunately, the wide hand-made clinchers of the 1950s are no longer available, and the just adequate tires I have to use compromise cornering a bit. Still, it puts a huge smile on my face as we zoom around the switchbacks. The bike is extremely capable, undemanding and fun to ride forever. Perfect for anything from fast, smooth descents to unpaved fire trails. You could use it to commute to work on a dark, rainy morning or to ride across the country (as long as you don't have much luggage). Just imagine what would have happened if mountain bikes had not been developed from cheap cruisers, but from bikes like this: We'd have true "go-anywhere-in-any-weather-in-comfort" bikes instead of the compromised creations that populate our cities these days.

Vintage Bicycle Quarterly - A newsletter about old bikes, French bikes, randonneuring, bicycle touring.

Jan's New Gig

Vintage Bicycle Quarterly, **a newsletter about old bikes, French bikes, randonneuring, and bicycle touring. With rare photographs, interviews, and inside information you're unlikely to find off the rack. To subscribe, send $ 24 for four issues (1 year) to: Jan Heine c/o Il Vecchio Bicycles, 140 Lakeside Ave., Seattle WA 98122.**

Coming in RR27…

Member Chuck Schmidt has a collection of more than 50 fine older bikes from the turn of last century to the late 1970s. He'll show and tell about one in each of the next four issues, at least. The *Reader* is not, primarily, about old bikes, but the fact is, the best of them were beautiful, practical, and showed a love of design and machinery that's often lost or lacking in modern bikes, and their influence will continue only as long as we see and learn about them, and we aim to bring them to you. And we'll likely have one more Jan Heine installment, either in RR27 or RR28.

Dill Pickles, Home Run Pies & Other Gut Balms For the Soul

by Henry Kingman

The biggest challenge on many a bike tour is getting enough to eat. The first day out, your body has to ramp up from normal to supernormal metabolic rates. A steady input of light snacks is ideal, with heavy meals avoided. Digestion requires energy, initially, and meats can take a day to digest when your metabolism is idling; and they draw energy from you while you're digesting them.

My favorite snacks include uncooked ramen noodles and 4/$1 Homerun pies. Any large package of cookies that costs 50 cents or less is a winner. Fruit is okay. Energy bars, sure, but they're costly and kind of gassy. These are just my tastes, mind you.

The odds of bonking or getting sour stomach are highest on the first day or two, so that's a good time to put together a little kit of gut balms. GU is a miracle of bonk recovery magic, and two packets will have you not only riding but hammering within minutes. Think of it as kindling, and eat something real soon.

Sour stomach is usually from dehydration, but the trouble is you can't drink because your stomach valves are shut down. The last water or food you took is trapped in there, gurgling around as you ride over bumps. The remedy is a dose of salt, ideally a dill pickle or a few crystals of kosher underneath the tongue. Add those or maybe a sachet of salt from a fast food place next to the GU in your kit. Once your valves open, drink a little bit, put plenty of good food on top of the bad, and keep going.

In America, every diner has one item on the breakfast menu that, with its name, dares you to order it. ("The Hungry Bear," or something). Order that one. Eat it all and watch the waitress react when you ask for another. It's the $10 breakfast, it's the same the world over, and you need it.

I like to break camp, ride for half an hour or so to get the blood moving, and then scout out a cafe. You know it's a winner if you find at least one full table of old men sitting around. Old men don't have time to waste on bad or pricy food. Once I find the place, I order the big one, and, if feeling efficient, do laundry or take a sponge bath while it cooks. Restaurants are much more likely to have hot water and soap than campgrounds. Then I pore over the maps while eating and glean local knowledge from the old men.

For lunch I like a deli sandwich and chips and soda, or a burrito. If the deli's in a grocery, you can get some fresh fruit, too. When I was poorer I used to just buy a loaf of bread or tortillas and something to put on it, but that can get kind of dry. Since I'm kind of at the mercy of whatever, I like to take matters into my own hands for dinner. That way, I never have to go to bed hungry, a situation that can slow me down for a couple of days if I let it happen.

Angel hair pasta is a staple. Boil water, set aside, covered. In second pan, cook roma/saladette tomatoes, mushrooms, tuna, pomi parmalat, etc. Set aside, covered. Return water to boil, cook pasta 2 min., drain into cups so you can sip yummy semolina tea with dinner, add sauce, a can of crushed olives, olive oil, fresh garlic, garlic salt, a full wedge of Romano cheese, chunked... mmmm.

Potato buds are another favorite. Cook them in soup, maybe. Enjoy bread with dinner. Carbos like pasta, bread and spuds release sleep-inducing hormones that will see you soundly through alien visitations during the night.

A tip that might help you if you're trying to max out your mileage: as with alcohol, the liver processes carbos at a fixed rate. So, take about 600 calories of carbos before your evening shower, as soon as you stop riding. Then have more with dinner. Try to eat your real dinner within an hour or so of stopping so your legs don't start to digest themselves. Some good hot campstove cuisine, a campfire and a nice long mummy bag slumber—that's living.

As you tour and develop your own routines, remember that it's impossible to overeat after the first couple of weeks. However, when the inevitable comes to pass and you find yourself once more back at home, you'll need to ramp your metabolism back down to normal. You'll still feel ravenous for up to a month afterward, so focus on salads and vegetables with high nutritive but low caloric content. I find this helps attenuate that wonderful sense of alertness and vigor that seems to ensue after a really stimulating bike tour.

Finally, remember that while these tips have worked for me through the years, perhaps only your bicycle seat is more intimately personal than diet, so take it all with a grain of salt.

Henry Kingman used to edit /California/ and /Texas Bicyclist/magazines at a time when there was no editorial budget; so he wrote most of the features himself.

The Raleigh Superbe

The Classic Three-Speed From Nottingham

by Sheldon Brown

The classic “all-steel” Raleigh 3-speed “light roadster” holds a place in cycling similar to that of the Model T Ford or the VW Beetle. This was the vehicle that brought independent mobility to the British working class during the Great Depression.

The bicycle industry, centered in the enormous Raleigh factory in Nottingham, was one of the most important in the country.

These bikes have a unique integrity, arising from the fact that they were built to be transportation vehicles, not sporting goods. The workforce that built them used the same bikes for their own personal transportation. These bikes were built to be ridden and relied on, not just to be sold.

They feature 590mm (26 x 1 3/8) wheels with Endrick or Raleigh-pattern rims, full steel fenders (or "mudguards" to the British) “North Road” upright handlebars, and cable-operated brakes. The frames are lugged, furnace brazed with decent-quality high-carbon steel.

Raleigh 3-speeds of the classic era had Dunlop tires and Brooks saddles. All of the other parts were made in the Nottingham factory, spokes, nipples, cables, hubs, bottom brackets, everything. No other bicycle brand has been so fully integrated in production and design.

They generally featured the Sturmey-Archer AW wide-range 3-speed hub, possibly the most reliable bicycle gear shifting system ever made.

The All-Steel Bicycle

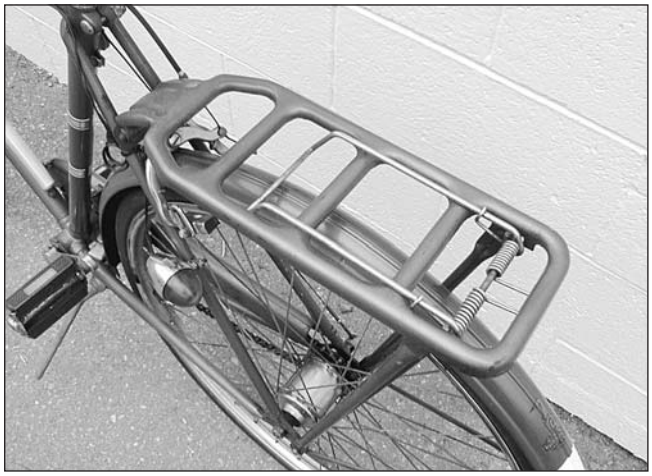
England's rise to greatness in the Industrial Revolution was largely based on the steel industry, and the English have always taken great pride in their steel. Raleigh originally used the slogan “The All-Steel Bicycle” around the turn of the century to show that they weren't using cast iron as some of their competitors did.

The Pecking Order

Raleigh made bikes under a variety of names. The top echelon was sold under the names “Raleigh,” “Rudge” and “Humber.” The different names allowed them to have competing dealers in close proximity, much as General Motors has Buick, Pontiac, Oldsmobile etc.

Lower end models, such as Robin Hood, Phillips, Dunelt were also available, as were private labels—if you bought 150 bikes, they’d put on any name you wanted: Huffy, Fleetwing, Royal Scot. These would be the Chevy Bel Airs of the line.

Note the stamped steel sidepulls (they feel great). The simple lugs, the key-lockable fork, the metal badge held on with rivets; and the standard-issue pump on the down tube. The fenders were painted the same sparkly olive as the frame; and look at the fender bullet. This is a homely bike with style, in the days when all homely bikes had style. "Superbe" may have been an optimistic name for such a coal carrier, but your average modern "pro" bike could take style and charm lessons from this one.



The original equipment rear rack, a stiff, strong, tubular thing painted to match. See also the rubber block step-on pedals, generator light (it still works), and the tip of the fender, painted white for style and maybe also to contrast more with its built-in reflector (not shown).

Characteristics of Raleigh's Best Bikes of This Era

1. The top-level bikes had the **"Raleigh pattern" or "Westrick" rims**, with their raised center section were heavier and a bit wider than the "Endrick" rims used on lower models, but they are as nearly indestructible as any bicycle rim can be.

2. Also, the best Raleighs of this period used **unique brake cables that had cast lead ends** both at the lever and caliper end. These had no cable-crushing anchor bolts, and were more reliable than the more conventional cable setup on lower models.

3. Of course this Superbe had a **Brook leather saddles**, as did most of its same-grade bikes. Usually it was the B.72. Lower end models had "mattress" saddles, made from cloth upholstery material over a framework of steel springs.

4. **Elegance!** In their forged front fork ends, brazed-on fittings for gear cable pulleys, chainguards and frame pumps. Fender stays welded to the fenders, not bolted.

5. **Distinctive fork crowns.** "Tubular style" fork crowns were utilitarian—made from a scrap of steel that would otherwise be discarded—but nice looking just the same.

6. **Ornamented chainwheels.** Many bikes of this era had manufacturer logos built in. You can see the signature Raleigh heron on the chainwheel on the next page. There were three herons per chainwheel!

The Rudge model had a sloping fork crown with chrome "hand" logo. The Humber had a distinctive, double-blade fork, and the chainwheel displayed little people running around it.

The Superbe model was deluxe. If I may continue the General Motors metaphor, it was the Cadillac of the line. Though it was basically the same bike as a "Sports" model, it came with these additional features:

Key-operated fork lock. This allowed the fork to be locked either straight ahead or turned to either side, rendering the bike unrideable.

Lighting system based on a Dynohub generator built into the front or rear hub. Some models also offered battery backup. The Dynohub didn't put out all that much light (1.8 watts), but was the most reliable lighting system ever made for bicycles.

Presstube" rear luggage rack. As you can see in the photo above, it was stout enough to hold a heavy load.

Brooks B.66 saddle with coil springs, instead of the springless B.72. Both are still made, and Brooks recently introduced a B.67 model, to fit regular seat posts.

This type of bike was virtually unknown in the U.S. before WWII. The U.S. bicycle industry was mainly making horrible, overweight balloon tired bikes as children's toys. Thousands of G.I.s who had served in Britain discovered how practical a well designed bicycle could be. When they returned home, some brought bikes with them, and others created a new demand for importation through conventional channels.

In some parts of the U.S., this type of bicycle was known among people who didn't know any better as an "English Racer", although they are a far cry from a racing design. Please don't call these bikes "English Racers!" While they are very nice bicycles, they have no connection whatever with racing.

In addition to its role as a utility transport vehicle, the sports bicycle was also extensively used for touring and cycle-camping, on both sides of the Atlantic.

Although not many people realize it, the symbol of Raleigh–the mark Raleigh puts wherever it will fit, is the Heron. It is on the head badge and fender decals, and here it is even more permanently built into the steel chainwheels. The head (with the feather crest) and long beak, neck, and shoulders of the Bird are clearly visible here, and in the opening page photo, if you look closely and use just a little imagination, you'll see all three birds.

The Rise and Fall

Raleigh bicycles were the gold standard for most of the world through the first half of the 20th century. By the late 1950s,Raleigh had acquired a near monopoly position—and this was not good. Up to that point, Raleigh was constantly seeking ways to make the bicycles better. Starting in the early 1960s, they had so little effective competition that the bean counters in charge redirected their efforts toward making the bikes cheaper, mainly by out-sourcing production. This led to a gradual decline in quality, and, ultimately, to the discontinuance, a few years ago, of production in Nottingham.

Fortunately, the older models were built to last a hundred years, and many of them will, with a few drops of oil every couple of months.

More Information On English Bikes

sheldonbrown.com/English

I also run an email mailing list devoted to English bicycles: sheldonbrown.ORG/englishbike

Brooks still makes the B.66, and we've sold a few dozen of them in the past year (now we sell the B.67). This saddle is cushy, and there couldn't have been a better choice for this bike. Keen-eyes will notice the old style saddlebag loops. They were rounded, so they never cut into the leather. New ones are stamped flat, and sometimes are sharp. It's nothing to whine about–we're lucky Brooks is even alive still—but there is a difference. Photo by Andrew.

Andrew Talks About This Bike

My Grandfather died last December, and when I went back to Michigan for the funeral, his bike, along with his fishing gear and radio-controlled airplanes, was still hanging from the rafters of the garage. He bought it new back in 1974 after a trip home to England, and kept it in good working order until he could no longer ride it. A few years ago he considered buying something more modern, but practicality prevailed and he didn't go through with it.

Even as a child I remember being fascinated by the unusual details, especially the locking fork, and I couldn't wait until I was big enough to ride it. I had a plain-as-can-be BMX bike at the time, and the Raleigh was about as different as you could get. I loved looking at the rack, the generator hub, and the little Rs on every bolt head, and wondering why on earth anyone would put so much work into a bike. Now, of course, I know, and I'm glad they did. There are lots of smart, pretty, and interesting details on this bike, and not to get all sappy and sentimental, but it just isn't something you see anymore, especially on affordable bikes. I'm glad this one's still around.—AD

Deparment of Pure Speculation

by the editor

IF THE SUPERBE WERE STILL MADE, EXACTLY AS IT IS HERE...

1. It would sell for $1,000, easy. There's a lot of work in it.
2. Nine in ten bike shops wouldn't touch it.
3. Raleigh USA marketing people would be ashamed of it, and it wouldn't be advertised.
4. People would pick it up and ask how much does this tank weigh?
5. We'd cheer it on and buy one, rebuild the wheels with aluminum rims, and like it a whole lot more, because steel rims don't allow even passable braking in the rain. (Maybe when they rust...)

A Case For the Underbike

I was at the airport baggage claim area about a month ago, and there was a bike policeman making the rounds on a mountain bike with a suspension fork and big fat knobbies. It was a normal baggage claim area, devoid of large boulders, deep ruts, and stumps.

I don't expect him to have a special bike for cruising the baggage claim, but it made me think even more than usual about what bike works for what kind of riding. This is a big deal these days, especially for new riders looking to buy one bike that'll work for all kinds of stuff.

I think choosing the right bicycle for a certain kind of riding isn't as important as modifying your riding style according to what bicycle you happen to be riding.

Just for a minute, think of bikes as ***underbikes*** or ***overbikes***. An underbike is one that's not quite or just barely up to the task—a road bike on a rough trail, for instance. An overbike is apparent overkill—a dual-suspension mountain bike on a paved road road or easy fire trail.

Riding an underbike can be either frustrating and dangerous, or fun and a good way to get better, depending on how you look at it. It is not inherently dumb. By today's standards, every bike ridden between 1869 and about 1945 was an Underbike (UB); and all you have to do is look around now and you'll see that almost every bike ridden today seems to be an Overbike (OB).

When you ride a UB down a rocky and loose trail, you're forced to pay more attention to the surface and the turns. Critics would say, "Th-th-th-then I can't relax and look at the wildflower-coverd hills, and the sunset, and the loping deer, and I have to go slower!" That is true to some extent, although there's a tradeoff that's not immediately obvious. A UB encourages you to ride more slowly, which means you spend more time on the trail, which increases your opportunities to gaze. On an OB, you're likely to blast down the trail faster, which in turn requires you to focus on the trail every bit as much or more than when you ride an UB. But since you're going faster, you shorten your ride and have less opportunity to see anything, anyway.

You could, of course, slow down to UB speed and take advantage of the OB's suspension and knobby fat tires to let you Gaze Afar, but when you ride an OB at UB speed, you're more likely to ride sloppily and form bad habits, because they go unpunished. I'm not saying you can't pick good lines though the ruts, just that when something isn't required, it's at least slightly less likely to happen. And, if you're out riding to enjoy nature, then consider how you and your monster bike look to other trail users, especially hikers. Bikes of any kind are machinery, and I'd argue that a UB is less intrusive than an OB. When you go for a ride in the woods, you have to weigh the bike's function, your skill, your wishes, and the impression you want to leave on other trail users. If you're out there with them, you become part of their environment, whether you want to think of that or not. It's just like when you're camping. In the winter, choose a bright tent, since there are fewer people out, and its color will help you find your way to safety during a white-out. In summer, choose a dull tent for camping above treeline, so your yellow hunk of nylon won't wreck somebody else's scenic photograph. The ethics of color and equipment is kind of a taboo topic, but it's one thoughtful riders will think about.

Sometimes a bike that seems to be overkill isn't. If you commute it still may be smart to ride fat tires with thick rubber, because getting a flat will make you late for work. So, let's not go around pointing fingers and shouting. The point isn't to live as close to the edge as you can. The point here is to, once in a while, choose an underbike and let its limitations change how you look at the trail, and let it help make you a better and more observant rider (and less of an eyesore to others out there).

Riding a UB off road isn't as macho as it is fun, anyway. It is remarkeably satisfying to learn to read the trail and choose the only acceptable path through a rough spot. You'll dismount more, but get past the point where you consider that shameful or defeating. Besides, the more you ride an UB, the less you'll find yourself dismounting. Riding an UB changes how you look at any terrain. With an OB, you feel more dominant and aggressive, but with an UB you feel more at the mercy of the land, so you cooperate with it more. You ride where it lets you ride, walk when it wants you to, and rely more on your growing skills than on the latest technology.

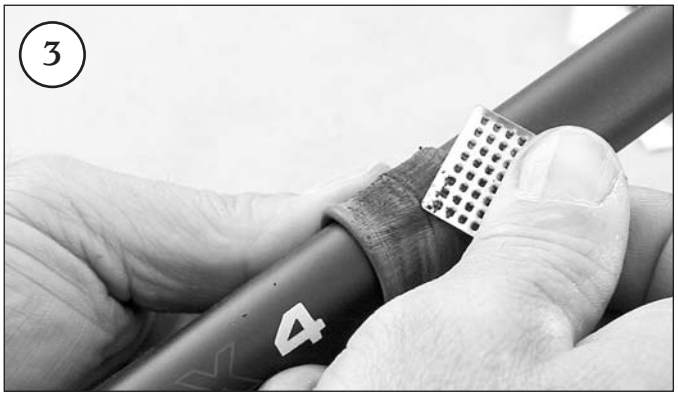
The idea of OBs and UBs has the potential to divide cyclers even more than we are now, or to compete with other cyclers to see who can ride the wimpiest bike on the roughest terrain. It's not a contest!

The only point here is to consider that what the bike doesn't offer in weaponry, you have to make up for in skill and judgement, so that the total bike/rider package works. It's fine to have a bike for every purpose, and tires for every kind of dirt, but don't go thinking it's actually necessary. Think of your skills and the bike's physical attributes as a team, and the more the bike does, the less you do. Sometimes you want that, but not always.

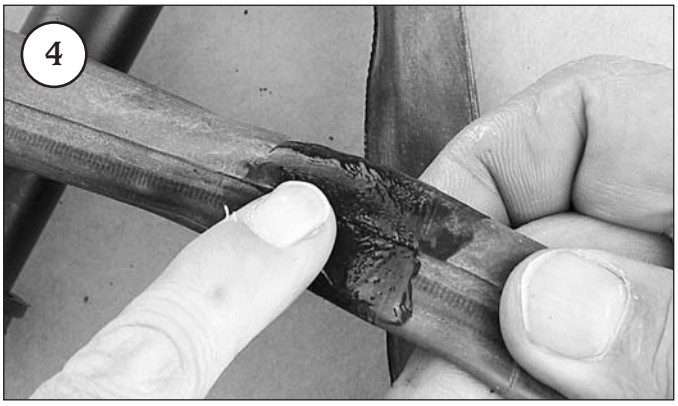
How To Fix a Flat...

First, locate the puncture, if it is a puncture as opposed to a pinch flat; then take the tire off. No doubt some folks can do this with out levers; don't want to hear about it.

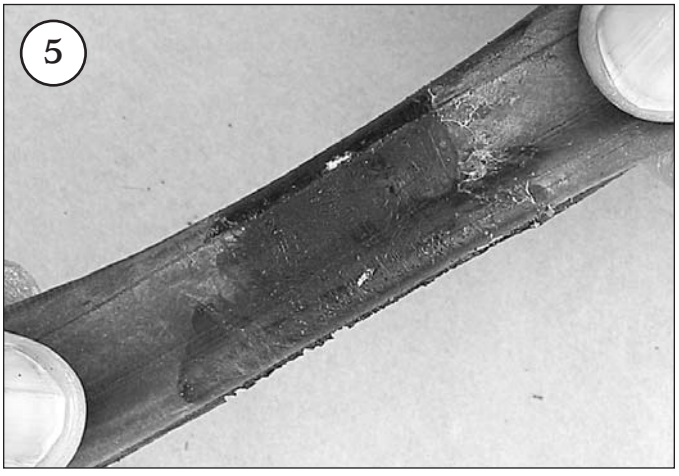
There's your hole. Actually, there's two of them, which says "Pinch flat! Pinch flat!" but we dinna look good enough to see it at this point. It all worked out in the end, though.



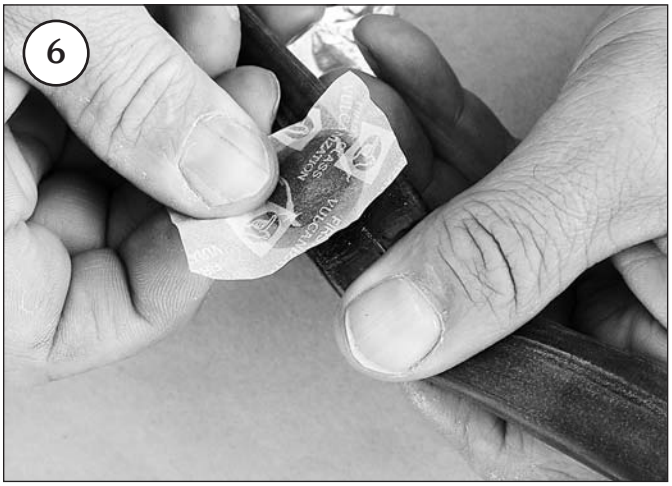
The French have a name for this—the *phase abrasion*, or abrasion phase. Wrap the flat tube around your pump so it doesn't slip around while you roughen the area around the hole with sandpaper or a mini cheese-grater.



Blob a puddle of glue about 75 percent as big as a pencil eraser on the hole, and smear it thinly, covering an area a little bigger than the patch. Small patches are good.



While the glue is still glistening, inflate the tire to verify that you have indeed abraded and glued the right area. The hole will spew out air and leave these marks. The French call them *endroit blanc* (white spots).



Put on the patch. The patches are sandwiched between a peel-off backing (clear stuff or waxy stuff as shown here) and foil. Peel off the foil. Wait until the prepared area is totally dry, then lay down the patch. Hit your mark!

...In 12 Easy Steps

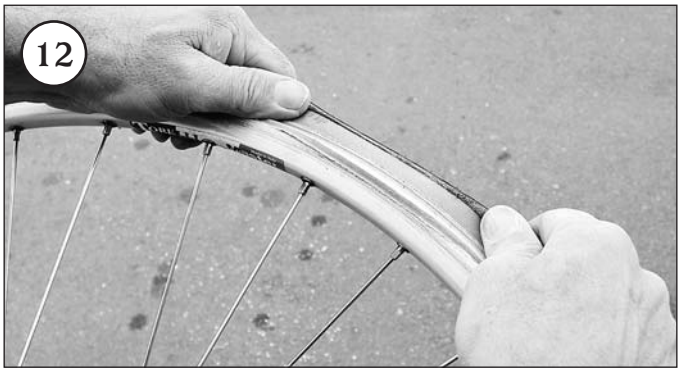
Press the patch down and rub it in. Put the tube on a hard surface (wrapping it around your pump works) and use the edge of your tire lever to smear it on there really hard. Press and rub as hard as you can. This makes a big diff.

If your patch had waxed paper on it, rubbing probably trashed it. If it had the clear stuff, it probably survived. You can leave the backing on or peel it off. If you peel it off, peel from the inside toward the edges, so you don't lift them. This one had waxed paper. Then inflate. It worked!

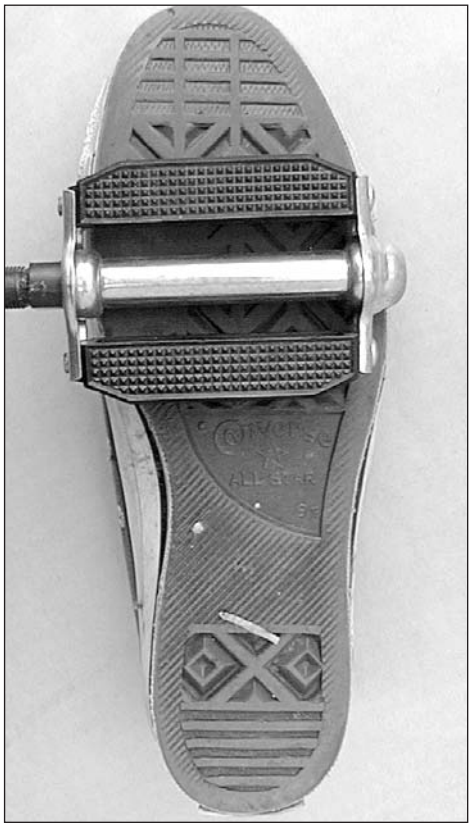
Before you reinstall the tube (or put in a new tube), coat it with talc. That prevents the tube from sticking to the tire, which makes extracting it easier next time. No talc? Use dirt. No dirt? Don't worry about it. I've read that talc reduces rolling resistance by helping the tube slip between the tire, but try proving that one!

Inflat the tube until it's round, put it instide the tire as best you can, and install valve first. First make sure the thorn is gone (rub a cotton ball around the inner perimeter, or use your fingers). Then make sure the spoke holes are covered by the rim tape. Then go ahead and do this.

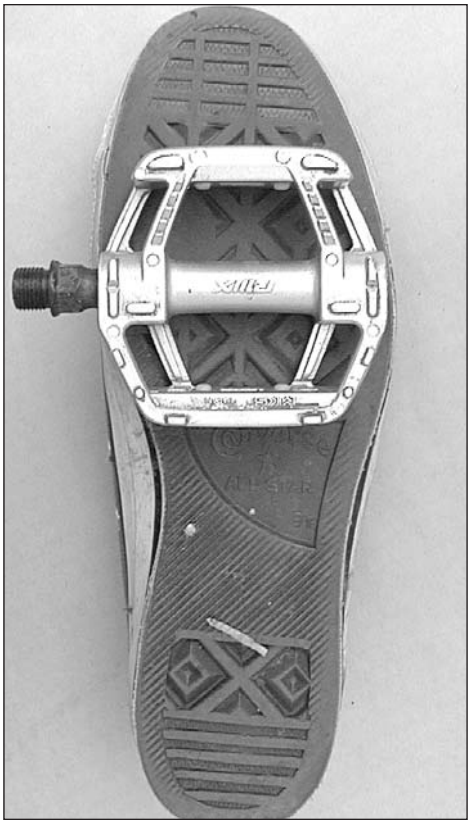
To prevent the valve from shifting, re-seat the tire symmetrically, working both sides at the same time. It takes some finagling, but it'll get there.



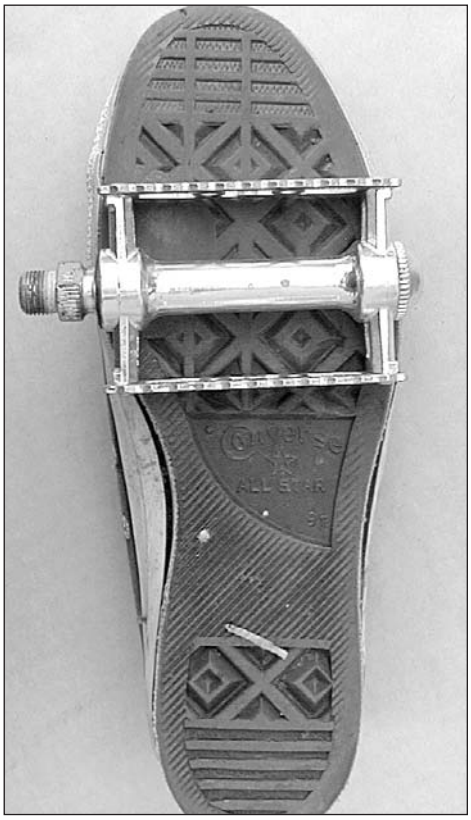
Final seating. This part is the hardest. Some tire and rim combinations will let you (of strong thumb and good technique) mount the last bit without using tools. It helps to "stretch" the tire from the valve, both sides simultaneously, to give you enough slack to push it on with your thumbs, like this. But if you have to use levers, don't let anybody yell at you for it. Ex-Var levers are the best we've used for this part. They never pinch tubes.



The classic rubber block pedal. So backwards even we don't sell them, but the best choice for riding in bare feet, zorries, or slippers. No doubt about it.



The MKS Super Platform, the least expensive model we sell, and fast becoming a favorite around here. Built-in reflectors, lots of contact area. Not toe-clippable, but heck—just $20.



The old standby MKS Touring pedal. Great grip. Best with a stiff sole, but for flat-to-rolling rides, you'll have no problem riding these with sneakers. No reflectors, but toe-clippabale.

R-E-S-P-E-C-T For Step-On Pedals

(they aren't just for kids and rookies)

Step-On pedals (SOP) are the first pedals you ever rode. They're the double-sided pedals you don't need clips for. You may be able to mount clips on them, but they work without them, too. Since they're designed to work without clips, they generally have some kind of shoe-gripping feature built right in—knobs, teeth, or just more surface area.

Lately, a lot of us here have been riding SOP and liking them a lot. It started on test rides on customers' bikes—to run through the gears, check brakes and handling and so forth (you don't need to be fastened to the pedals for that). We just needed a pedal to pedal. Long test rides lead to longer normal rides, overnights, commuting, and then to pretty much regular use. The more we rode SOP the more we realized two things:

1. The advantages to being connected are exagerated.

2. Sometimes SOPs are flat-out the best.

Those are big, tough, nut-like pills to swallow for one who's pedaled with and praised clips and straps for 28 years, and I imagine they are for the clipless folk, too. You don't *want* to like the same pedal technology that kids and grown-ups who don't know any better ride. But it's hard not to.

I still prefer clips and straps for wet hilly rides, because depending on the shoes I'm wearing, the clip and strap keep my foot from slipping. And for all-out efforts, being connected lets me flog a bit more without worrying about coming off the pedal. Finally, for city riding,clips and straps make it easier to lift the rear wheel onto the curb. But even for those situations, there's not a night-n-day difference between pedaling connected and pedaling free. Connected wins by a hair, but there's lots of normal riding between all-out hilly efforts, rain riding, and curb-hopping, and that's when SOP make more and more sense.

Where Step-Ons Win Hands Down

On steep trail rides, when you're alternating pushing and pedaling, it's great to just have a pedal to stab at. There's no flipping into it, and no lining up the engagement points

on click system. On loose steep trails, the smoother circle you can achieve connected reduces slipping, but it's a hair-splitting difference. And if you have to stop and remount (despite your efforts), you're better with SOP.

On cold-weather utility rides, where your foot temperature is one of your chief concerns, it's nice to be able to wear super thick socks and puffy boots and still ride.

On summertime rides to the pool, where you'd just as soon wear sandals. With step-on pedals, you can.

On photography rides, when you're on and off the bike a lot, clambering up hillsides to get the good vantage point. Having shoes you can scamper up a cliff in makes sense.

The point is, you can ride SOP in whatever footwear makes sense for the weather, terrain, and your purpose.

Why Cyclers Give Them Up In the First Place

As a new cycler gets more into the sport, the move from sneakers to cycling shoes is a milestone in the transformation from casual to committed, and is usually concurrent with getting a better bike and riding more miles. It's easy to see cycling shoes as a diploma of sorts, and once you've popped for them, it's tempting to denigrate the sneakers and cheap pedals you used to use—like a sophomore bullying a freshmen. Certainly, the salesperson or cycling mentor who persuaded you to convert will applaud your decision, and all in all, it seems like a step in the right direction, and one you'll never go back on. Most riders don't.

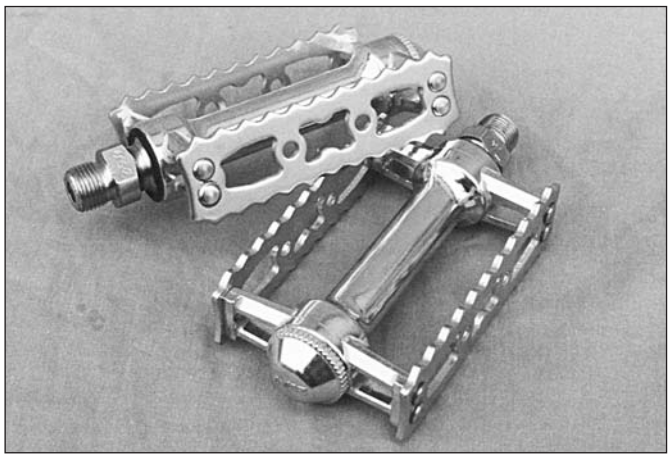
How much less efficient are you with SOP? My fastest time in 3 years up the local mountain happened about 2 months ago, while I was pedaling SOP and wearing sneakers. It beat my previous best time in 3 years, which was posted with Teva sandals. I'm not saying I wouldn't have gone as fast or faster had I been better connected, but let the record show that my two fastest times in the past 3 years and more than 50 attempts are with SOP.

SOPs are not as inefficient as you may have been led to believe. You can still drag the pedal through the weak spots in your stroke, easy. And pedaling scientists have proven that even the super pedalers don't add power on the upstroke. I'm not saying SOPs are best for all conditions. Ultra steep hills, ultra wet conditions, and racing are three situations for which being connected may offer a safety, psychological, or actual real advantage. But the difference is small in any case, and in certain common circumstances, SOP are undeniably the best.

Most people's last experience with SOPs is on a clunky jalopy bike. That's not a fair test. *Put them on a good bike for a few rides.* It's a fairer test, and you may discover something. If you have lots of nice bikes, it's not a bad idea to keep one ready to go at all times with Step-On Pedals.

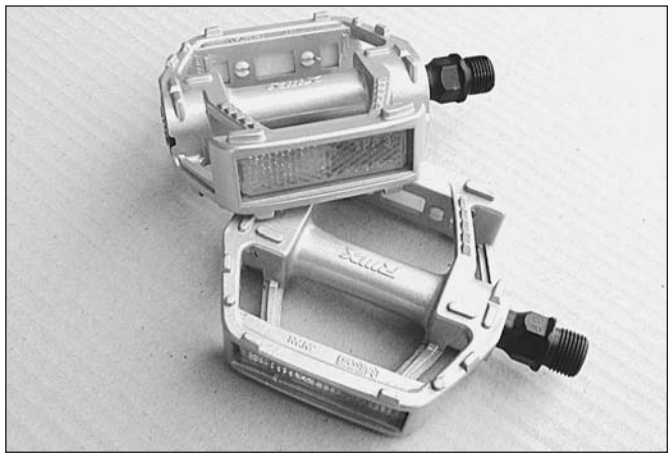
Shoes For Step-On Pedals

Well that's the thing. SOPs don't limit you to any kind of shoe in particular; the only irony being that they usually work better with rubbery and flattish soles, which rules out a lot of cycling shoes. You can shoe-up according to the weather. Sandals in summer, Sorels in Winter, sneakers or low-cut hiking shoes when you ride off road and might be hoofing it some. SOP don't care what you wear. Put some on a good bike, try them for a month, and you probably won't go back. There are times when you might want to be connected to the pedals; but riding free works better than you've been lead to believe.



MKS TOURING PEDAL
14-020 $38

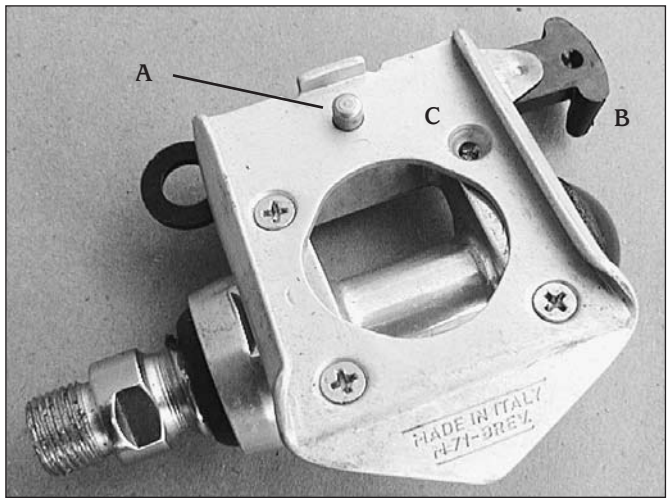
The basic, original "rat-trap" style pedal that welcomes any shoe short of a flip-flop. Grips rubber well, and is large enough for boots. It has a threaded dust cap for easy access to the bearings. You'll like it a lot.



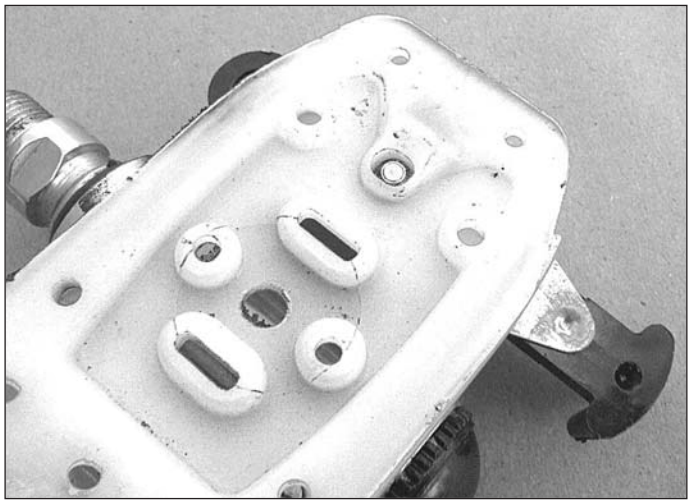
MKS SNEAKER PEDAL
14-047 $20

Made as a BMX pedal, but we like it for general SOP use on or off-road. The built-in reflectors make this a natural for commuting, and the large contact area is friendly even to flimsy-soled flip flops. Pry-off dust cap.

Two Peculiar Pedals From the Past…



Cleat's view of the M71. A Right pedal. "A" is the pin that engages the cleat when you push in "B," which is shown pushed in, which is why pin "A" is sticking up. "C" is a missing screw. Ebay?



The shoe sole's view of the cleat. It engages the bent-over rails of the platform (visible in the other picture). The holes around the perimeter are for nailing it to your shoe. See the face?

Cinelli M71 Pedals—The first click-in

These have been referred to as "suicide" pedals, just because once you clip into them, you can't unclip without reaching down and pushing in the release pin. It's not that hard to do, but you wouldn't want your life depending on doing it successfully *right now*. I'd like to be able to tell you that the M71 stands for Milano, Cinelli's home town in those days, and 1971, their year of conception. It might be true. What I do know is that Daniel Rebour, cycling component illustrator, first illustrated them in 1973; and Cinelli was and maybe still is headquartered in Milano.These were top-class, professional parts, probably aimed at riders who wanted to try something new and weren't closed-eyed Campagnolo loyalists.

There were several reasons they never took off. First, nobody kicked Campagnolo around in those days. Second, they required their own cleat (and came with it). So if you already had a pair of shoes with cleats mounted on it, you couldn't just buy a pair of these. Third, in the early 1970s cleats started showing up with integral cleat-mounts that made them incompatible with these pedals. Add to those hurdles the fact that you had to reach down to unclick yourself, and you've got all the reasons you need for explaining why they didn't take off.

Phil Wood CHP

Back in 1975 or so, Phil Wood was concerned about the lack of reflectors on pro-quality pedals, so he made these and called them CHPs, because they were made in accordance with the California Highway Patrol's recommendations. The reflectors aren't removable, even.

Like all Phil products then and now, they had sealed bearings. This cutaway view (we borrowed it from Phil) shows also a needle bearing — or is it a roller bearing? —in the middle of the axle (or is it a spindle?). The body was a simple aluminum extrusion, hacked to length. The rear portion of the pedal has a raised lip to engage a pedal cleat, so you could race these as well as any pedal. Being a platform style, they were quite comfortable with just about any shoe, and although they were never a hit with racers (the looks, the reflectors…), they were, for a few years, the Range Rover of pedals among rich tourists. They cost about $50, the same as Campy, and those were days when tourists usually rode cheaper stuff than racers. Phil no longer makes these. No market, plus the bearings, when they finally needed servicing, were a real pain to service. Phil did it themselves, and it just took too long. It's a nice design though, isn't it?

...And One You Can Still Get, and Might Want To Give Some Serious Thought To: The Bullseye Woody

Right off the bat I should say that Bullseye's Roger Durham is sort of a personal bikedom hero of mine. He's a smart engineer and a cycler who doesn't give a hoot what anybody else does or thinks. I wish I were like him.

He's now 75 years old and continues to ride. For many years he was a member of the L.A. Wheelmen, and completed 6 triple centuries and countless mere doubles and singles—often coming in at the front.

Roger's most successful product by far has been derailleur pulleys. Bullseye pulleys were introduced in the early 1970s as the first sealed bearing pulley, and Roger advertised them as saving enough energy—compared to Campy's bearingless pulleys— over a 100 mile ride to haul a 50-pound sack of potatoes up a 17-story building. He's made lots of other products, all with the same smart thinking behind them, but none has taken off less than these wooden platform pedals. And, none is as much fun.

Roger notes that the muscles you use when pedaling are partly selected by your foot's position on the pedal. In the standard position with the ball of your foot over the center, you use what Roger calls "toe muscles"—the same ones you use when standing on your toes, or at least the ball of your foot. That's fine, it works well, but he's a big believer in spreading out the load, so to speak, to other leg muscles. On longer and hillier rides (his specialty), he's found it's an advantage to do this, and to do it requires a pedal you can move your foot around on. That's why Roger made these.

I've been reexamining foot-position since Sheldon Brown told me he was doing the same, and I've put in a lot of miles—by non-Lon standards—with Step-On pedals. I buy Roger's claims about the different muscles kicking in, and about how it's a help on long climbs.

Finally, I got some Bullseye Woodies. Roger makes them up to 4" x 6", but likes 4 x 4s or 4 x 5s (shown) for general use. I've pedaled them about 700 miles now, including several trips up the 11-mile, 3600' local mountain, and on lots of trails, too. I've climbed the steepest hill around here in them, and even on a morning I didn't feel so good and had a gutful of barbecued salmon from the night before, my time up it with these pedals was in the 80th percentile of all my times up it in the past 5 years. (Brief note to locals: Martino Rd. in Lafayette, from Springhill to the T at the top: 9:25). They're as comfortable as you'd expect. My rubber-soled sneakers don't slip on them (I told Roger I might put friction tape on them, but he scoffed. He says you've got to be able to move your foot around on them, and friction tape—small sections cut from 3M 40-grit adhesive-backed disc sander pads, part no. 9172NA—makes that harder. Not convinced; I did it, anyway).

They mount to any crank, using a 3/16-inch allen. There's a sealed needle bearing midaxle, for radial loads, and a ball bearing outboard for thust. No other bicycle component varies as much as pedals, and these woodies are proof that there are lots of radically different approaches that work.

If I were a bicycle tour operator, I'd keep these handy for a rider who comes down with a pedaling- or shoe-related malady. You can shift your foot around to help alleviate a screaming knee, and you can pedal in your favorite Hush Puppies.

Woodies aren't the ticket for that Urago you've been preening for the concours, but in the real world, they're pretty good. They cost $75 direct from Roger at Bullseye, and I think they're a blast. If you put them on a bike, you'll keep them on. You'll do it for fun, and the more you pedal them, the more you'll like them. Especially with friction tape!

BULLSEYE: (818) 846-9163

The Atlantis makes a great road or touring bike, and here's a typical setup for that: drop bars, roady tires (shown with 26 x 1.25). This one here is a 47cm, and it's perfect for short riders. Typical rider height, 4-11 to 5-3; typical saddle heights, 62cm to 64cm.

The Atlantis as a Road Bike

The Atlantis continues to be a huge hit with everybody who rides it, and that's about 400 people in all. There is no typical way to set it up, but one of the most common ways is as a roady touring bike, as shown here.

The frame is ideal for it. When you ride what we'd consider to be stout, versatile road tires—something about 32mm wide (actual width) such as the 26x1.25 Panaracer Pasela shown here, or its 700x35 cousin, the Atlantis gives a spirited and lively ride that won't hold you back on any non-competitive ride. There's more than enough room for fenders, so you can ride it all year around no matter what the weather. So many of our customers mount fenders as soon as they get the bike, and never take them off, even in summer. That way, they don't lose them or get tempted to use the fenders on another bike.

The 47cm Atlantis deserves special mention, because it fits 5-footers. Most 5-foot riders end up on much smaller frames, and suffer the same low-handlebar problems that taller riders do; and get sore in the same places. On the 47cm Atlantis, it's easy to get the handlebars up above the saddle, and that makes a huge difference in riding comfort. This is a point we'll beat to death until the cows come home, because it makes a big difference.

Another common set up is with Priest handlebars. If you haven't ridden Priest handlebars, you probably haven't experience such comfort on a bike before. They put you in the original bike riding position, nearly upright, with hardly any weight at all on your hands, and no strain on your back or neck. It's not the position for fast group rides, but it is hard to beat for rides up to about 15 miles, on any terrain. Freddie Hoffman, who has ridden a bike 3 times as far as anybody else (going on 1.3 million miles now, and he's in his early 40s) rides similar bars on his bike, and finds them suitable for his rides averaging more than 90 miles per day. So…don't blow them off as mere commute bars.

The lugged steel frame is straight, true, and strong; the geometry is perfect for anything from short commutes to long, loaded tours, and it's ability to fit racks and handle the heaviest loads makes it perfect for anybody looking for a bike that's comfortable, smart, convenient, and fun to ride. We've said it before and still mean it: The Atlantis is the most versatile bike we can make.

Any Atlantis makes a great mountain bike. The 58s and larger take 700c tires. This 61cm is wearing 700x47/52 WTB Nanoraptor tires & Moustache Handlebars. There are many 700c mountain tires available now, from both WTB and Schwalbe. They're all good, too.

The Atlantis as a Mountain Bike

The modern mountain bike has morphed into a complex and largely unattractive overkill device that preys on insecurity and fantasies that don't come close to reality. Its benefits kick in only on the roughest terrain. The bouncy ride is annoying most of the time, and if the shock-absorbing capabilities of a fat tire filled to 40 psi aren't enough for you, you either are riding way rougher terrain than we see out here (a possibility, although it gets pretty rough here) OR you have some serious technique honing to do. On most terrain, a mountainized Atlantis is a better way to go.

Here's how to mountainize an Atlantis:

Tires: Fattish knobbies in either 26-inches or 700c, depending on the size frame you get. In general, negative tread patterns work better for hard-pack, and positive knobs work best for loose dirt. Got mud? Ride skinnier tires, so the mud doesn't build up as fast and get jammed in the frame. Don't think too much about tread pattern or rubber compounds; basically, riding off-road is riding on looseness, so the grippiness of the tire depends more on the tire's teeth than on its rubber compound. Hard ground is best with shallow or negative tread (big knobs bend and squirm); deep loose dirt is best with tall knobs that penetrate it and grip.

Handlebar and stem: Nitto Moustache Handlebars and Nitto Technomic Deluxe stem, 8cm. The bars simulate a flat-bar position, but offer way more hand positions and look better. They're ideally mated with road levers and bar-end shifters. But by no means are Moustache H'bars the only way to go. Drop-bar fans may still want to ride drops, and flat bar fans can go the normal mountain bike rout on the Atlantis, as well. The best way to set it up is what you're most comfortable with. We here like the Moustache H'bar for off-road riding, for sure.

Shifters: These here are Shimano indexable bar-end shifters set on friction mode. We rigged the bike before we received the Silver shifters. Either one is fine.

Brakes: Shimano Cantilevers. Again, any cantilever or V-brake will do. If you ride V-brakes with road levers, you'll need widgets called Travel Agents to make them a compatible combination. Most shops sell them.

Note the short stem. At 8cm, it's about the same length as you'd typically see on a 52cm road bike, but it's equally suited to bigger bikes for riding off-road. In this case, the Moustache Handlebars curve forward of the stem clamp, adding additional reach, so you don't need a longer stem. The short stem also allows you to keep your weight to the rear on steep descents, which lets you use the rear brake more effectively, and prevents pitchovers.

Myths about standover clearance. You don't need that much of it. Obviously you need to be able to straddle your bike on uneven terrain; and last-minut forced dismounts on steep climbs often requires a fair amount of clearance; but that "fair amount of clearance" is less than the compact frame folks would have you believe.

Treating Road Rash

Minimize pain, control bleeding, speed healing, & minimize scarring

by Dr. Bernie Burton, a dermatologist

Eighty years old, 5,600 miles per year, and still not invincible. This is Rivendell member Bob McBride's leg after a mishap on a rainy road while riding a 54cm Rambouillet prototype. Surprisingly, he was otherwise unscathed. Even more surprisingly, when his son came to pick him up, he bore no ill will toward anybody here at Rivendell.

All you need and maybe more:

The Paranoid's Road Rash Kit includes Vaseline, No-Stick Telfa Pads, Coban elastic, Tegaderm bandages, ELA max, and Hydrogen Peroxide; some of which is shown here. Good luck finding Coban.

Sometimes you can find Vaseline in a small tube, and the next time you do, buy several. The goods are shown here in the box, so you know what kind of boxes to look for, but for on-the-road use, combine and consolidate your kit.

Here's What To Carry

1. Vaseline— the first aid kit in a jar, although for on-the-road use, get it in a tube or small tub. It doesn't take much, and is handy in preventing saddle sores on long rides. Always bring Vaseline.

2. Want to go all out? Add non-stick telfa pads and a flattened soft, adherent Coban elastic bandage (or cheaper copy). Use these to cover your wounds, until you can get home do better.

3. A tube of ELA-max from your local pharmacy. It's a pain preventative, and it's a key part of a wound-care kit, since it hurts to scrub the grit out of a bad scrape. ELA-max is a recently available topical OTC Xylocaine preparation. You rub it into the wound gently for fifteen minutes, then scrub it aggressively with sterile gauze, sterile saline and Hibiclens. Stop when the wound is red, raw and totally clean.

4. And maybe Hydrogen peroxide. It's a cauterizing agent, and you should use it only on stubborn wounds which keep oozing blood. Use it only for stubborn bleeding, because it can do damage.

Treating Road Rash Cheaply

Cover the wound with Vaseline. Many people are allergic to neosporin and other "fancier" preparations, and rather than testing yourself, just use Vaseline. Cover the Vaseline with sterile Telfa pads. Use a COBAN or coban-equivalent, to hold the telfa in place.

A More Expensive Way

Get Vigilan, SPENCO SECOND SKIN or Tegaderm—basically, bandages that protect the wounds and help them heal without drying out. You can let them stay on unchanged for up to three days. Only drawbacks: They're expensive, and in rare instances may increase the rate of infection.

Change your dressings once or twice a day for Vaseline and telfa—every two to three days for synthetic dressings. Clean the wounds with soap and water—use sterile saline if you don't trust your local water supply's chlorination program—before you apply the dressing.

DON'T LET IT SCAB!

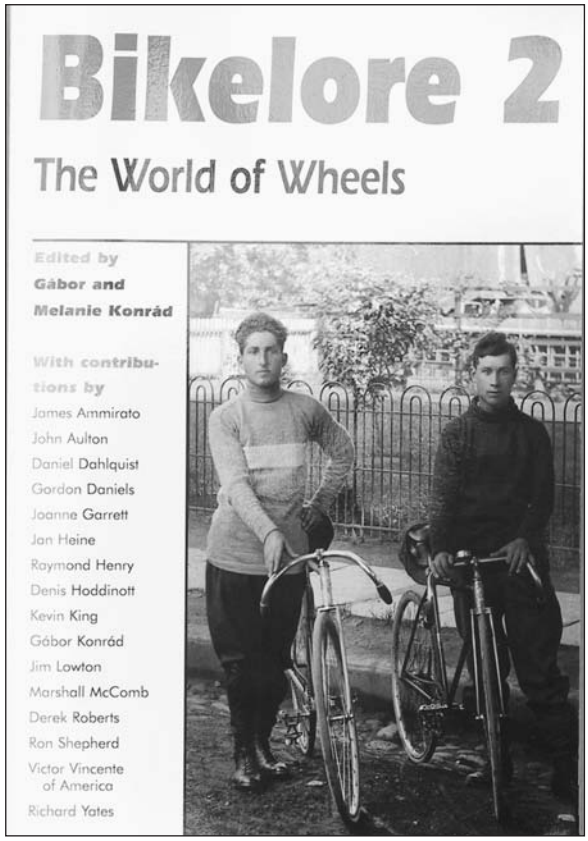
The goal is to eliminate any chance of scab formation. A scab allows the wound to heal in the reverse image of the scab. The preceding technique will ensure that your wound will totally heal in from the bottom. When the wound is totally filled in—and no raw skin remains—you can stop dressing changes.

A warning sign of formation of a thick, elevated scar—known as a keloid or hypertrophic scar—is a sudden increase in redness at the pink wound site. This will occur probably soon after the wound is totally healed. To prevent scarring, daily massage (five to ten minutes three times daily) with lotion or vaseline is recommended beginning immediately after total wound closure.

Better yet, use a silicone gel sheeting held in contact with hypoallergenic waterproof first aid tape (hospital name BLENDERM) for four to eight weeks. Curad silicone gel bandaids, which have just become available, can simplify this for small wounds.

If you have large areas of road rash, make your own silicone gel sheeting.

Gabe's Second Book



Gabe Konrad and his wife Melanie have published their second book. Gabe's the country's youngest bicycle historian, and will likely be the world's authority on some things long after we're all gone, and this book, Bikelore 2: The World of Wheels, is a compilation of essays mainly about old racers and old racing, with some bike poetry thrown in for fun.

It's a good book. It's self-published (as On The Wheel publications) in a limited edition, not because it isn't good enough for Houghton-Mifflin, but because it's too esoteric for big publishers (so Gabe and Melanie do it themselves).

Gabe, being an author himself, writes several of the essays, but there are other names as well, some of whom you're familiar with if you read the *Reader* (Jan Heine), and others you may know from other bike travels—Victor Vincente of America, Raymond Henry, and Ron Shepherd, to name three.

Bikelore 2 is a 166-page paperback. It costs $18.95 direct from Gabe. It's a good book, and if you like racing and history, you'll love it.

email Gabe: konrad@triton.net

www.onthewheel.com

HOW TO MAKE SILICONE GEL SHEETING

Ingredients:

1. Silicone window caulk
2. Teflon cookie pan

Instructions:

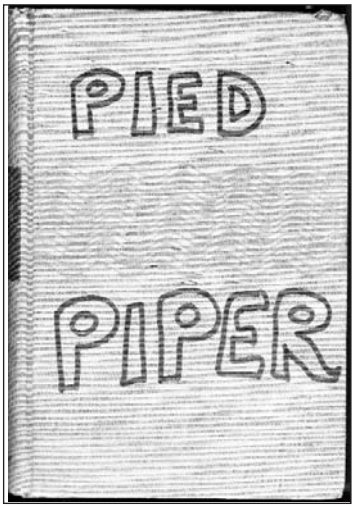
Cover cookie pan with silicone gel to an even depth of 2 to 4 millimeters. Let dry. Cut into pieces large enough to cover wounds. Cover wounds after daily bathing. Remember to only use silicone gel sheeting on totally healed wounds—the chance of infection is high if you start it too soon. Remove before your next bath.

Final Warning About Scars

Don't ever use benzocaine, Solarcaine or topical Benadryl. These substances can cause make the wound more sensitive, and greatly increase the chance of scarring.

Do all it takes to avoid them. Old, hardened scars on elbows or knees, or any other part of your body you might put weight on, can make it painful to do such simple things as put your elbows on a table, or rest on one knee. If you want a record of your pain, take photographs of your wound instead.

Pied Piper by Neville Shute



Neville Shute is long dead, but what a great writer he was. We'll offer several of his books during the next year or so, and if you read fiction, you're sure to like them. We offer a money-back guarantee of it.

Pied Piper takes place during WWII, and it's a story about an old guy from England who took a fishing trip to Switzerland to get his mind off his son's death in the war. Then the war got worse, and he wanted to get back to England. Along the way he picks up some young children here and there so they can make it out of the war zone, and this is the story of their journey. It's a good book, way better than this review makes it sound. The copy shown here is old. Yours will be brand new.

This book was published in 1940, so you won't read of it elsewhere. It's hard to find new, even at Amazon. They can order it for you, but we have it in stock. Get through the longish first chapter and you'll be hooked. Moneyback guarantee, too!

Part no. 23-024, $13.

Shimano Nexus Generator Hub

by Andrew Drummond

Back in October, I started thinking about investing in a good light. I'd been looking at rechargeable batteries (especially the NiMH models), but eventually settled on a generator hub, both for environmental reasons and because they're so elegant. The last straw was when Rivendell member Henry Kingman came by with his Schmidt dynohub—one look at that, and I was sold on the idea. So I looked around on the web for a generator hub, and all signs pointed to Peter Jon White, who aside from being almost the only source for generator hubs in the US, also happens to be one of our Atlantis dealers. I checked out his website, and after looking at the beautiful Schmidt hub (and its hefty price tag), the cheapskate in me decided to give the lowly Shimano Nexus HB-NX30 generator hub a try. At $45 for a solid axle and $55 for the quick-release version, it seemed like a great deal. The total cost came to about $105, including a Lumotec lamp (with an LED that lights when you're stopped), the switch, and two 3W bulbs. The switch may not be absolutely necessary; some lamps have their own. The Shimano switch, though, has a photosensor – when set to auto, the lamp comes on by itself. The hub will work with any 3W lamp, or a 2.4W lamp combined with a 0.6W taillight. I like the Lumotec, because not only does it have an integrated reflector, but there's an LED that comes on automatically when the wheel stops turning, and stays on for 6-7 minutes. It's not terribly bright, but it's enough to see a map by and may keep you from being run over by a car. The main bulb is surprisingly bright for only drawing 3 watts—the reflector is very efficient. My wife Jen and I rode with Bhima and his girlfriend up to Davis, CA for Thanksgiving, and ended up riding the last couple of hours in the dark. Bhima and Ariella had fancy battery powered lights, and I had the Cat Eye LED headlight that we sell. Jen had the generator hub, and her light alone was ample for the four of us, riding through the middle of nowhere on gravel and paved roads. Jen's been using it every day since for commuting, and loves it. It was originally destined for my bike, but she ended up with it because she walked into the garage as I was hooking up the wires to test it out,

The hub is nice enough, with a satin silver finish. It comes both nutted and quick-release versions, which is the one shown here. I took this one apart to investigate it, and found it easy to adjust and reasssemble.

If a somewhat ugly black plastic photosensor hanging beneath your Cinelli-crowned fork bothers you—and you're clever— you can get around that by using a lamp that has its own switch.

having just finished building the wheel. I spun the wheel, the lamp lit up, and she said "Ooh! When do I get one of those?" I had to give it to her. She rides in the dark at least as much as I do, and I figured I'd better nurture whatever interest she shows in bike stuff. For now I've got the Cat Eye LED light, but I think I'll be getting another generator hub soon.

It's a neat lamp. The 3W bulb is bright enough for most anything short of super high-speed riding on totally unlit trails; and it's surounded by a reflector, the outer part. What's more, an LED comes on when the bike is stopped. There's a bracket for either cantilevers or sidepulls.

As far as long term durability goes, the Nexus hub may not rank up there with the Schmidt, but you don't have to disassemble the wheel and send the hub to Europe for servicing, either—it has regular cup and cone bearings, and can be maintained at home. There's a little more drag in this hub than in a Schmidt hub (you can see the specifics on Peter Jon White's website, www.peterwhitecycles.com), but for a commuting bike that's really no big deal—and the drag is significantly reduced when the switch is in the off position. It seems like a great hub so far, having been used for about two months now in wet, nasty weather (readers in Minnesota may take exception to that, but I'm talking about wet and nasty for California). The only drawback we've seen so far is how easy it is to open up the Lumotec lamp housing to change bulbs. Jen is a teacher, and somebody (a curious child, perhaps?) took the lamp apart while her bike was locked up outside her school. A parent was kind enough to bring the scattered parts back inside, though, so she was able to put it back together without any tools.

How To Get One, and Price: Any dealer can order it for you, and Peter White Cycles (978) 635-0699 in Acton, MA has them in stock now. Price is about $55 for the hub, and $36 for the switch, mount, and lamp.

Who Rides a Rivendell?

Todd Teachout

The Rider

Age: 44

Occupation: Civil Engineer for the city of Pleasant Hill
Favorite…
Cycling shoes: Sidi Genius 3 or 2; or Puma, Detto Pietro

Food: Cold boxed cereals mixed. Corn Flakes, Cheerios, Wheaties, Rice Krispies…
Author: Thoreau, Tolkien, Turgenev
Movie: My Fair Lady, Lost Horizon, Best Years of our Lives
Years Riding: 39 total, 30 as adult-like enthusiast

Favorite Type of Riding: Unsupported brevets
Number of riding days per week: 2 to 4

Other bikes: Cinelli, Eisentraut, Paramounts, Teledyne, RRB, Raleigh, Rochet, Geminiani, Diamondback

Dream Ride: Lands End to John-0'-Groats

Interests: Mechanical watches, slide rules, drafting and surveying instruments, sailboats, violins, rowing shells

Why a Riv?: Craftsmanship, the lugs, not a "racing bike."

His Bike

Frame size: 61 c-to-c (add 1.45 for c-t)

Headset: Tange

Stem: Nitto Pearl

Handlebar: Nitto deep drop 40cm with padded white foam

Seat post: Nitto Frog (Nitto calls it the Jaguar)

Front Derailleur: Campy Veloce

Rear Derailleur: Campy Racing Triple 9sp

Crank: TA Alize 172.5

BB: Phil Titanium

Wheels: Mavic MA2. F. Hub Schmidt; R Hub Campy

Tires: Performance Forte, Roll-y Pol-y, Michelin Axial

Other: Campy Carbon shifters, B.17 ti saddle, Banana Bag, Wellgo clipless pedals, Nitto "Butterfly" cages, Mavic Dual Pivot brakes, Avocet Cyclometer, Cateye taillight, Lumotec headlight.

Who Rides an Atlantis?

Cathy Hoffman

The Rider

Age: 41. Married 7 years to Jonathan. Two dogs.

Occupation: Student nurse, nearing completion of 2nd baccalaureate degree.
Favorite…
Cycling shoes: Specialized Touring, circa 1985-6
Food: Vegetarian Pizza on whole wheat crust
Author: Joyce Carol Oates
Movie: Forrest Gump
Years Riding: 35

Favorite Type of Riding: Long distance, self-contained touring.

Types of riding on my Atlantis: Commuting, day rides, trails, club centuries, and touring.
Number of riding days per week: 6

Other bikes owned: Burley Duet tandem, Raleigh fixed gear, 1970s sport touring

Dream Ride: Self-contained cross-country tour with my husband, riding Adventure Cycling's Northern Tier route.

Interests: Dogs, hiking, reading, drawing, photography.

Her Bike

Frame size: 51cm

Headset: Tange Falcon

Stem: Nitto Technomic Deluxe, 7cm

Handlebar: Nitto Moustache

Seat post: Nitto Crystal Fellow

Front Derailleur: Shimano Sora

Rear Derailleur: Shimano Deore

Crank: Sugino XD2-500, 170mm 46x36x24

BB: Tange

Wheels: Bontrager rims, DT spokes, SunTour XC9000 front hub, Deore rear cassette

Tires: Panaracer Pasela 26 x 1.25

Other: SKS fenders, Terry saddle, MKS Touring pedals

Well, How Was It?

If you got this issue of the *Rivendell Reader* at a bike show or event, or from a friend, or you're reading it in a waiting room (we are in a few waiting rooms) and you liked it, why not subscribe? This is a pretty typical issue. We cover a variety of cycling topics outside of racing, and once in a while have something not about bikes at all (like the horseshoe story). It's not as polished as it ought to be, and there's no color yet, but four issues costs only $15, and with your subscription, we also send you all our catalogues, flyers, and—hold onto your hat now—a $10 credit toward your first purchase (from our catalogue). So, if you take away that $10 from the $15, it's, like, just $5 for four issues. That's $1.25 an issue, which is a pretty good deal by modern bike periodical standards.

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