Fat Tire Flyer™



MARCH/APRIL • VOLUME 3, NO. 2 • $2.00

THROUGH THE MOUNTAINS OR OVER THEM...

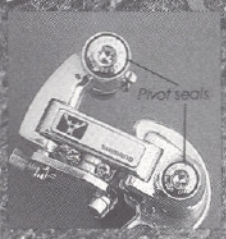


For maximum braking power the Deore XT cantilever pulls with optimal 90° efficiency.

Touring cyclists and mountain bikers have something new in common, Shimano Deore XT.

Our new XT Series Deore components have what it takes to conquer the great outdoors with two legs and two wheels, because we built them lightweight, dependable and ready for action.

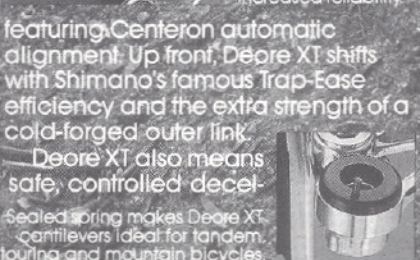
Taming 18 speeds is child's play for Deore XT derailleurs. At the rear is the long-cage, high-capacity M700, sealed at the pivots and



The light alloy, long cage Deore XT derailleur has special dirt seals for increased reliability.

featuring Centeron automatic alignment. Up front, Deore XT shifts with Shimano's famous Trap-Ease efficiency and the extra strength of a cold-forged outer link.

Deore XT also means safe, controlled deceleration, with the all-new MC70 cantilever brakes. Cleverly designed and fully adjustable to fit all popular bosses (including Mafac), the XT brake arch is buttressed and cold-forged for rigidity and strength. The unique arch design also provides peak pulling efficiency, creating a 90° angle between cable and arm when pad contact is made.



Sealed spring makes Deore XT cantilevers ideal for tandem, touring and mountain bicycles.

XT large flange alloy hubs are special, too, rolling on 3/8" chromoly axles

Sealed hub design gives Deore XT free-spinning action and easy adjustability. Fits all standard freewheels.

and featuring Shimano's revolutionary new sealed design. Double-ring seals at both ends completely seal the entire hub from damaging dirt and moisture without sacrificing serviceability.



Uni-shift ratchet action makes Deore XT thumb shifters foolproof and easy to use.

The human side of Deore XT shines right through in our engineered brake and shift levers. Specially designed to keep your hands on wide stance bars, these XT levers put all the controls right at your fingertips.



Cold-forged alloy brake lever is rugged and perfect for mountain bike bars.

Standard Deore and Shimano 600 Series levers are available for touring bicycles.

Deore XT components are ready for the great outdoors, and they are waiting for you at your local bike store.

DEORE XT

TOURING AND OFF ROAD COMPONENTS

SHIMANO

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SHIMANO SALES CORPORATION 9259 San Fernando Road, Sun Valley, California 91352

Fat Tire Flyer™

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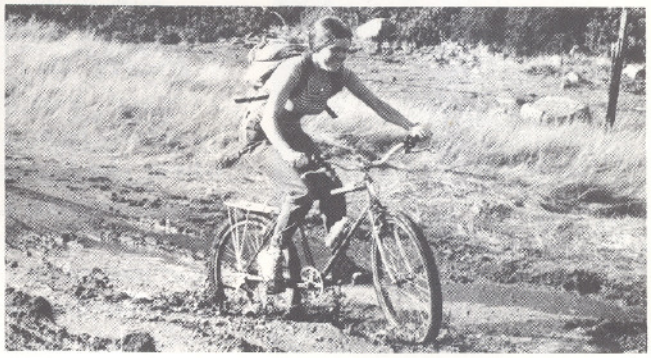
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David Favello

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NOTICE

from the Fat Tire Flyer

To any and all Fat, Creative people! In order to provide a complete, well-rounded, and objective publication, we need your help. Photographers, writers or just plain readers/riders, we need your stuff. Unsolicited manuscripts are always welcome as are letters or comments. Photographs should be black and white.

Send all materials to:
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Editorial

England has fallen . . . for Fat Tires. Well, maybe only in a small way so far, but the American Revolution is taking place over there. The cover of the February issue of a slick consumer mag, BICYCLE, features a model in western drag (six-guns, spurs, boots, 38 liter hat, etc.) mounted and wheelying on a well-known American-made mountain bike. The full-color two-page spread in the center features more of the same action, and the accompanying text is oriented to the rootin' tootin' aspects of off-roading. It won't be long yeh, yeh . . . but it might be Fat.

One of our letter writers this month asks where he can find out about good places to ride. An excellent question, because it's so easy to answer. He can't. But wait; there's light at the end of this boring sentence. Jean McPherson of Berkeley is hard at work compiling a list of the best rides in California. (No regional bias intended; that's where she lives.) In future issues we'll take advantage of some of Jean's research and alert the Fat Troops to those remote roads and untravelled trails that abound in the west. We certainly encourage submissions of favorite rides from anywhere, and if interest warrants, we'll make it a regular feature.

Other headlines from the United Kingdom highlight the serious side of Fat Tires. Two English cyclists, Tim Gartside and Peter Murphy, have set out for a little jaunt . . . across the Sahara on their American off-road bikes, from Algiers to Lagos. The ride is scheduled to last three months. Tim has claimed fame before, once for touring on his bicycle from England to India, and again last year at the Human Powered Speed Championships, where he won the solo rider event at over 50 mph. We'd like to take this liberty to quote Tim from a postcard we received from Algiers.

"The bikes are sheer brilliance; they've stood up to some dreadful punishment south from Algiers (heavily loaded).

We take off across the 650 kms of 'piste' (rough, sandy) track on Friday. Will really test the bikes out . . . Best regards, etc., Tim Gartside."

This month's issue features the first part of a two-part gearing article from the self-admitted "gearing freak" himself, Frank Berto. Frank will be known to many readers as a widely published expert on his favorite subject, and here for the first time he discusses off-road gearing.

What are you waiting for? Go to the next page.



David Favello

Fat Feedback

Dear Fat Folks;

Just received the new issue, and what an improvement! Excellent graphics and layout, very clean and easy to read. You know, we thought you'd gone under! How could you hope to have made it on 6-buck subscriptions? Now that the worst is behind you, you will have a period of real growth. With Fat-Tire popularity ballooning (sorry) you can't help but be a success.

However, questions:

Re: Volume II, No. 3

1) Where is Badlands?
2) Where is Whiskeytown?
3) When was Reseda to the Sea run?

Re: Volume III, No. 1

1) Where is Annadel Park?
2) Why is there no list of coming events?

It is important for us to know what's coming up and where, before it actually happens. Now that you are better organized, perhaps this can be given higher priority.

We enjoy the Tech Tips and words on riding technique. How about some articles on neat places to ride?

Again, please accept my congratulations on the occasion of your ressurection.

Yours,
Thomas Pollack

Editor replies:

Badlands is located near Redlands, California, somewhere in the vastness of San Bernardino County. Whiskeytown is in the mountains east of Redding, California. Reseda-to-the-Sea is run in the first week of March.

Annadel Park is in Santa Rosa, California. You will find a list of events in this issue. Thanks.

Dear Fat Tire Folk,

Always enjoy reading the FLYER and I want to thank you for the write-up in the May-June issue, re: CLASSIC BICYCLE & WHIZZER NEWS. Please be advised, though, that CBWN doesn't really have a strict schedule since we operate on rather limited funds due to a divorce of the editor-publisher (me). The subscription guarantees six issues, but not six times a year. There are presently 16 back issues.

I agree with your editorial on Fat Tires. Only thing is, where were you guys when I was begging the industry a few years back to make Fat Tire (balloon tire) bicycles again. I used to get lots of horse laughs at the trade shows whenever I mentioned the topic and one editor for a certain publication said to me about six years back, "You're crazy — they'll never make balloon tire bicycles again, thank heaven." "Who'd want 'em?" was the usual reply.

Fortunately, a few years later I was able to put my 2 cents worth in on the Murray balloon cruiser and others when manufacturers all-of-a-dogbone-sudden went back to producing balloon ers as I had urged earlier. Nobody's laughing now, but I wish I had a dime for every time they used to laugh.

By the way, I noticed you published a kind of bibliography of articles on ballooners a bit back and you left out the original: my own. I did the first nationwide article (in fact, international) on classic balloon bicycles in 1977 and this was published in January '78 issue of POPULAR MECHANICS. I also did the very first article on balloon classics revival to appear in a trade magazine in November 1979 BICYCLE DEALERS SHOWCASE. One article you listed in another trade magazine was, ah, uh, "lifted" from the original article I wrote down to exact wording and sentences and this was done a couple of years after my own. The latter magazine was not at fault, though, since the article was freelanced to them and they assumed it was original. In any event, mine was first.

I was also the first to delineate, define, and categorize the Classic Bicycle in a copywritten piece done in 1979.

I think eventually that people will come around and the industry will realize that all bicycles don't have to have skinny tires to be good.

I presently own over 200 classic bicycles and most are original fat tire bicycles. Although my area of interest with balloon tire bicycles differs much

Continued on page 16





Fat Tire Innovators

By Sonny Kawai

Scores of innovative, imaginative people have played a role in the development of today's fat tire bike. Here are profiles of eight, each of whom has, in our opinion, earned a solid place in fat tire history.

Breeze: First Mountain Bike Frame in History

Joe Breeze is, with no doubt, regarded as one of the mountain bike originators. By developing a light weight, lugless mountain bike frame out of 4130 CrMo tubing in 1976, he became the very first successful mountain bike frame builder.

Before 1976, enthusiastic wilderness bikers were using cruisers or old fashioned klunker bikes that were modified with modern 10-speed components. But, with Breeze's innovation in 1976, the history of the fat tire bike dramatically changed, and consequently, his frame design and specifications became pretty much standard in fat tire bike engineering.

His master brank bike, Breezer, has a beautiful nickle plated frame and fork, and sophisticated components. And the rigidity of the bike is always highly praised.

Joe Breeze is also a world bike tourist. On his trip to New Zealand, people who saw his bike there were amazed by its rigidity, high performance and sophistication even in off-road dirt riding.

Breezer **$1,600.00**

BREEZE CYCLES
28 COUNTRY CLUB DR.
MILL VALLEY, CA 94941

Cunningham: Most Advanced, Most Expensive Bike

Charlie Cunninhgam's aluminum frame bike is the most expensive mountain bike in the whole marketplace. He says, "My interest is in building the most advanced off-road bicycle possible. As a consequence, I have chosen to ignore (within limits) cost, convenience, ease of fabrication and prevailing style. I have worked to improve and refine the standard while keeping the result mechanically simple."

After his careful examination of material, aluminum was chosen for the frame. He says, "It is relatively easy to build a strong, stiff frame. The real challenge for me has been to make the frame at least as strong and stiff as the standard, while reducing the weight as much as possible. These qualities are not mutually exclusive, as one can see in the work of the aerospace and aircraft industries."

Cunninhgam also creates several special components for his bikes, such as a seat post, seat post clamp, power brakes and so forth, all designed to maximize his bike's performance. All the craftmanship in his bikes result in a price of $3,500 to $4,000 retail.

His bikes are currently rarely seen in the marketplace. Less than 100 bikes have been manufactured.

But he just recently registered a new master brand name, 'Indian,' and he will be a little more aggressive in increasing the number of the bikes that he makes, and reducing their price.

Indian **$3,600.00**

CUNNINGHAM APPLIED TECHNOLOGY
121 WOOD LANE
FAIRFAX, CA 94930

MountainBikes: Best-Known Bike

The Ritchey Frame, made by Tom Ritchey, may be the best known name in the U.S. Fat Tire marketplace. Tom Ritchey is also known as one of the originators of today's mountain bike phenomenon, which spread out of the San Francisco Bay Area.

Tom manufactures a special off-road handlebar/stem unit called "Bull Moose." It is widely used, and its unique shape gives his bike a true wilderness look. Ritchey bikes are distributed by Gary Fisher and Charlie Kelley of the company "MountainBikes" in San Anselmo, Ca., themselves well known as opinion leaders of the sport.

The legendary Gary Fisher is the first mountain biker in history to have taken the fenders and coaster brake off of his old newspaper boy klunker bike to have put on derailleurs in the early 1970's.

The Ritchey mountain bike is, according to Gary, "not just a frameset, it's also a complete system of components chosen from the best of bicycle and motorcycle components by way of our long experience with these bikes.

MountainBike's aim is to produce "the world's most versatile bicycle," to be used as a utility bike, touring bike, or even a racing bike in the new sport of off-road bicycle competition.

Everest	**$1,818.00**
McKinley	**1,128.00**
Mount Tam	**875.00**
Tandem	**2,300.00**

K & F MOUNTAINBIKES
P.O. BOX 405
FAIRFAX, CA 94930

All Terrain Bicycles: The Strongest Bicycle

Although the well-known Koski Brothers of Marin County, Erik, David and Don, work closely together in many different ways to promote their master brand bicycle "Trailmaster," they are in separate businesses. Erik is concentrating his entire energy in building fat tire bikes at his machine shop in Mill Valley, while David and Don manage a retail business at Cove Bikeshop in Tiburon.

Don is also involved in designing Trailmaster frames with his brother and designed a basic form of original Pro-cruiser model for Lawwill-Knight, Ltd. several years ago.

Erik's dream is to build "the strongest bicycle in the world." To give maximum strength to the steering system, he uses a BMX style straight front fork instead of a tapered curving fork. He chooses tubing material very carefully to be able to put together stiff and rigid TIG welded frames. He also always exchanges ideas with neighbor Marinites such as Charlie Kelly and Gary Fisher of MountainBikes, Steve Potts of Wilderness Trail Bikes, Charlie Cunningham of Cunningham Applied Technology, Joe Breeze of Breeze Cycles, etc. to come up with better ideas to improve his frame in quality and in cost. Erik Koski has recently formed a new corporation with his partners called "All Terrain Bicycles," or simply "A.T.B.," to take care of wholesale business in fat tire bikes and components.

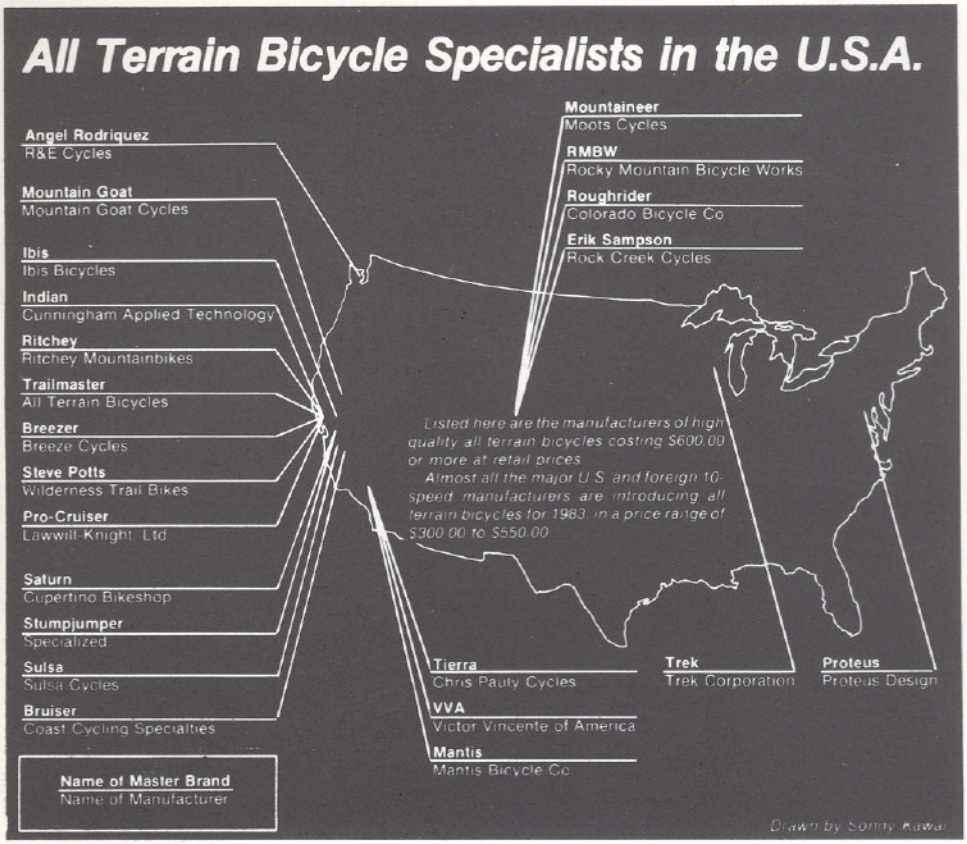
Trailmaster **$1,500.00**

ALL TERRAIN BICYCLES
235 SHORELINE HWY.
MILL VALLEY, CA 94941

Mantis Bicycle Co.: Finest Craftsmanship of All

The most distinctive and characteristic feature of Mantis bicycles is probably the beautiful finish work and fine details. On their "Sherpa" model, 0.035" wall large diameter 4130 CrMo tubing is joined in a lugless brazing technique. The joints are then hand finished, producing large, graceful fillets without undercutting the tube. Although this method of construction is time consuming and therefore costly, the result is dependability in performance and beauty of appearance. In other words, it's worthwhile.

Richard Cunningham, not related to Charlie in Northern Ca., is also very aggressive in promoting both his cross country competitive racing bike and his touring bike. He says, "Cross country racing is one of the most exciting and fastest growing cycle sports today. Until the advent of the 26" wheel multiple speed off-road bicycle, off-road racing was confined to short, closed circuit tracks designed for cyclocross or BMX type bicycles. Cross country racing integrates the qualities of both cyclocross



and BMX without the limitation of closed circuit. The excitement of competing on a 20 mile course over steep fire roads, stream crossings, and winding trails is incredible!

For this, he developed the XCR model. Imron paint on all models highlights their outstanding craftsmanship.

XCR	***$1,605.00***
Sherpa	***1,550.00***
Overland (Frame Kit)	***750.00***

MANTIS BICYCLE CO.
350 E. ORANGETHORPE #27
PLACENTIA, CA 92670

Mountain Goat Cycles: The Most Unique Klunker

Wm. Jeff Lindsay is not new to the bicycle industry — years of riding experience and frame building are the solid foundation for his Mountain Goat Cycles.

Applying his 10-speed bicycle technology, he started putting his full energy into frame building of high-tech fat tire bicycles in 1980. Jeff uses several unique design ideas. One distinctive characteristic is oval 4130 CrMo steel for the top and down tubes on his two models of Mountain Goat frames. A durable joint is formed with the interlocking construction, resulting in a stiff frame that enhances bicycle maneuvervability and rider efficiency.

Also, Jeff manufactures a one-piece handlebar/stem unit which is similar in concept to Tom Ritchey's "Bullmoose," but different in appearance. The Mountain Goat handlebar/stem unit is a "T" shape, whereas Bullmoose has triangular design.

Jeff's fine craftsmanship in filing, brazing and setting up frame alignment is highly regarded and his beautiful and colorful paint attract people who see it.

Mountain Goat DeLuxe	***$1,505.00***
Mountain Goat	***1,205.00***
Escape Goat	***785.00***

MOUNTAIN GOAT CYCLES
P.O. BOX 3923
CHICO, CA 95927

Rocky Mountain Bicycle Works: Winter Application to Klunkers

Many more people are adding new dimensions to the versatility of the fat tire bicycle. We already know that the fat tire bicycle can be ridden on all terrain. Now, it is no longer a seasonal mode of transportation. Mike Rust of Rocky Mountain Bicycle Works, who moved out of the original klunkers' nest of Marin County to the foothills of the Rocky Mountains a few years ago is experimenting with tire chains on klunker bikes for use on Colorado's icy, snow-packed streets.

Not only that, he is also developing such equipment as studded tires, for use under tough weather conditions.

Mike currently has his bikes and components under extreme testing conditions. A bicycle frame and fork he built is crossing Canada. The rider left Vancouver, B.C., Jan. 1, and plans to ride the 3,800 miles to Halifax, on the Atlantic Coast, in roughly two months. It will be a good opportunity to see the results of the test through ice, snowy mud, and temperatures way below zero.

Future innovative efforts like what Mike is doing may make fat tire bicycles useful not only in all terrain and all weather, but also in all human lifestyles.

ROCKY MOUNTAIN BICYCLE WORKS
6524 MESA RD.
FOUNTAIN, CO. 80817

Specialized: First Volume Marketer

"It's not just a new bicycle, it's a whole new sport." This has been the lead to Specialized's fat tire bike advertising for the year 1982.

Mike Sinyard, president of Specialized, has been pioneering not only in the existing 10-speed bicycle market, but in other bicycle related and un-related marketplaces, to create a broad demand for the fat tire bike. His advertising has reached into all the bicycle publications, some major newspapers and entertainment magazines, and even some of the mail order gift catalogs, to get maximum exposure.

This kind of pioneering involves a certain amount of risk. Because no one else does it, it is hard for the company to measure the effect of the promotion and the results of the initial investment. But Mike believes that the fat tire bike has a bright future because it is a brand new, original concept. Through tremendous market research, including extensive collection of dealer opinion, Mike already had his basic sales projections completed and the first production model designed (with the cooperation of designer Tim Neenan) two years ago.

Now, Jim Merz, known as one of the finest framebuilders in the U.S., has joined Specialized to design future products. At first, Mike targeted at a $750.00 price with the "Stumpjumper" model, which has become one of the most recognized fat tire bike brand names. Then, he came out with the $499.00 "Stumpjumper Sport" model, before anyone else got into that price range. Before Specialized, good, sophisticated fat tire bikes were only for a handful of people who care about quality and disregard cost. However, through Specialized's engineering and marketing efforts, the fat tire bike has become affordable to ordinary people who do not want to spend more than $1,000.00 on their bikes. Consequently, Stumpjumper and Stumpjumper Sport have become the first successfully selling high volume fat tire bikes in the U.S. Specialized deserves recognition as the major force in broadening the market size for fat tire bicycles.

Stumpjumper	***$750.00***
Stumpjumper Sport	***499.00***

SPECIALIZED
844 JURY CT.
SAN JOSE, CA 95112

Prices are suggested retail as of Feb. 1983.

Tom Meyer



ALL ABOUT

MOUNTAIN BIKE GEARING

by Frank Berto



PART I

GEAR SELECTION

Off-road mountain bikes are geared differently from plebeian racing or touring bikes:

- Low is lower so you pedal (rather than push) up any hill that your rear wheel can grab.
- The gear train is designed for quick positive shifting under load.
- The steps between gears are wider so that when you shift one step, you feel a significant difference.
- Mountain bikes use extra-long cranks to go with the low-cadence, stand-up-and-stomp, hill-climbing technique.
- The components are bullet-proof to survive in the high-shock, wet, dirty, off-road environment.

Five years ago, the pioneer bomber-bikers made their gear trains with hybrid mixtures of MX, racing, and touring components. The Mount Tam-Repack test laboratory soon showed up the weak sisters. The lst of survivors spread by word of mouth. I recall Simple-USA telling me that they were selling four front derailleurs for every rear derailleur. The SLJA-523 was an early survivor.

Today, mountain bike sales are more than 5 percent of the U.S. market. Sakae, Shimano, Sugino, SunTour and Takagi now provide partial or complete grupos of factory-designed mountain components.

I'm going to tell you how to use this new equipment to provide a tailored-to-you gear train for your mountain bike.

If you use your mountain bike mainly on paved roads, you'll probably be happier with a conventional Half-Step plus Granny touring gear train. See the March, 1981, issue of "Bicycling" magazine for details of conventional bike gearing.

Choosing High Gear

High gear uses the big chainwheel and the little freewheel sprocket. The normal way to select your optimum High is to pick the wrong one for your first gear train. You correct the mischoice the second or third time around. The normal way is also probably the best way, since no two mountaineers have the same strength or pedal over the same terrain. Anyway, here are my rough and ready blues.

High should be somewhere between 85 and 105 inches. The highest two or three gears (i.e., the big chainwheel gears) are mostly used on paved roads, getting to and from the trails. You won't be pedalling downhill at 100 rpm and 35 mph on rough trails unless you own stock in an emergency hospital. The long, 175mm to 185mm, cranks slow your cadence down a bit, which lets you push a taller High gear. This effect seems to be cancelled out by the higher wind resistance of the upright position and the slightly higher rolling resistance of fat tires.

The standard arrangements use a 14-tooth freewheel sprocket to reduce chain load. You combine this with a big chainwheel in the 46 to 52-tooth range to give you 90 to 100 inch High.

If you like bombing downhill

on paved roads, you might want a High above 100 inches. The 13-tooth freewheel is a better answer than an oversize chainwheel, and it keeps the front derailleur capacity within bounds.

Big chainwheels under about 46-teeth may drop the front derailleur too low. The heel of the front derailleur may foul the rear derailleur cable unless the cable is routed under the bottom bracket.

Choosing Low Gear

This is straightforward, at least as I see it. You can't be too low when you're mountain climbing, and you can always use second gear. Install the smallest granny chainwheel that will fit your crankset. Combine this with a 34-tooth big freewheel sprocket. Low will be in the 19 to 22 inch range, depending on whether your crankset takes a 24, 26, or 28-tooth chainwheel.

If you really want to radiate a macho image, use a 30 or 32-tooth large sprocket. This limits the useful range of your middle chainwheel where you spend most of your time.

SunTour's AG rear derailleurs do a heroic job on the 38-tooth AG sprocket. I see the main role of the 38-tooth as an economy wide-range five-speed or a ten-speed with an Ashtabula crankset.

Gear Selection

By trial and error, mountain gearing has evolved into a pattern. You have three distinct gear trains, one on each chainwheel. The big chainwheel is for street riding. The middle chainwheel is for level and uphill trails. The inner chainwheel is only used with the two or three big freewheel sprockets. These bull-low gears are used for belaying up vertical pitches. The chain will hang slack in the little-little gears and it's assumed you have the brains not to use them.

Almost all shifts are made on the rear derailleur. There's no effort to coordinate the gears between chainwheels because there's no double shifting.

If you buy my proposal that all mountain freewheels should have a 14 to 34 spread and you like relatively even steps between gears, then your five cog should be 14-17-21-26-34, and your six-cog should be 14-17-20-24-28-34. This gives 25 percent steps and 20 percent steps between gears, respectively. You can move a tooth or two on these selections to suit your fancy.

Pick the middle chainwheel somewhere between 36 and 42 teeth to match your hills, your crank length, and the bolt circle of your quadriceps. Smaller middle chainwheels climb steeper hills and spin out earlier on level trails. If the middle chainwheel is to small, you may encounter upshifting problems from the granny. This happens when the chain hits the middle and the outer chainwheel simultaneously.

In the next issue Frank Berto will explore the nuts and bolts of gearing in PART II-IRON MONGERY, the technical aspects of gearing.

Coming Events
Coming Events
Coming Events
Coming Events

MAY 15 (Sun):
Rock Hopper. Santa Rosa. Contact: Tom Hillard (707) 526-BIKE or 527-LUNG.

JUNE 5 (Sun):
Whiskey Town Downhill. Redding. Contact: Gary (916) 243-7101.

JUNE 5 (Sun):
Mt. Wilson Hillclimb. VVA. Contact: (213) VVA-3300.

JULY 10 (Sun):
Topanga Sun Tour. VVA. Contact: (213) VVA-3300.

JULY 17 (Sun):
Velo-Promo Cross Country. Santa Cruz. Contact: Bob Liebold(408) 425-8688.

JULY 31 (Sun):
Tahoe City to Truckee Cross Country. Base Camp. Contact: (916) 583-5306.

AUGUST 14 (Sun):
Devil Mountain Hillclimb. Mt. Diablo State Park. Contact. Jack Ingram (415) 798-3950.

SEPT. 10 & 11 (Sat-Sun):
Sespe Hot Springs-2 stage. VVA. Contact: (213) VVA-3300.

SEPT. 23-24-25 (Fri-Sat-Sun):
Friday: Paradise Divide Fat Tire Stage Race. Sat & Sun: Pearl Pass Grand Tour-Crested Butte to Aspen, Colorado. Contact: Bicycles, Etc. (303) 349-6286 or Paradise Bikes & Skis (303) 349-6482.

OCT. 9 (Sun):
Mt. Lemon Hillclimb (20-mile uphill). Oreacle (Tuscon, Arizona). Contact: Gordon's Bike Shop (Ric) (602) 326-4652.

OCT. 9 (Sun):
Rock Hopper. Santa Rosa. Contact: Tom Hillard (707) 526-BIKE.

NOV. 13 (Sun):
Puerco Off-Road Bike Classic. VVA. Contact: (213) VVA-3300.



Coming next issue:
THE SUNTOUR AND SHIMANO GROUPO SHOWDOWN
by Glenn Odell.

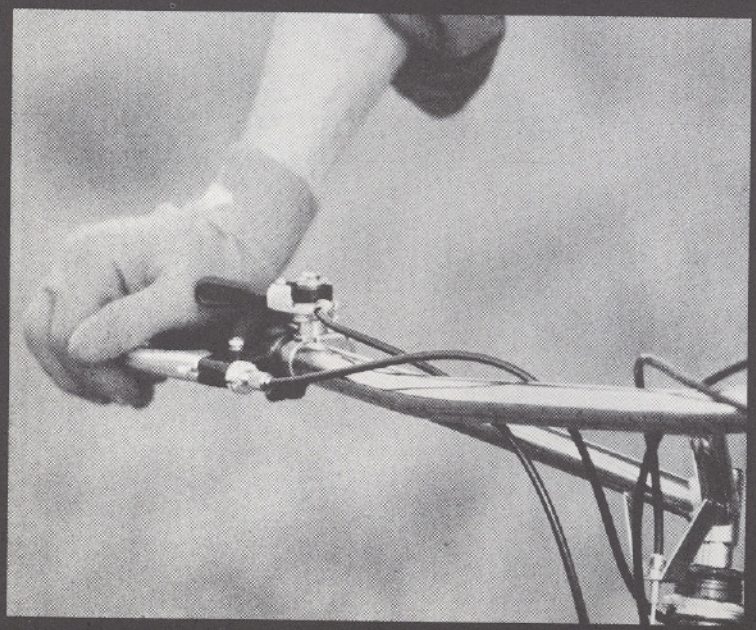
ROSS BIC

FORCE I

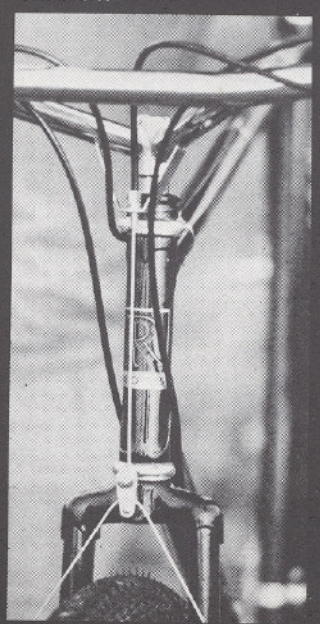
Model No.: 386
Color: Black
Frame Size: Mens 19", 21", 23"
Tubing: Ross Am-Lite
Lugs & bottom bracket: Nikko
Crown: Tange
Dropout: High tensile steel
Rims: Ukai gold alloy
Tires: 26" x 2.125" G.W.
Brakes: Dia Compe cantilever
Crankset: Shimano AD 28-39-48 chainrings
Stem: Nitto cro-mo
Handlebar: Nitto cro-mo
Hubs: SR gold alloy
Saddle: Ross Strada
Seat post: Alloy fluted
Pedals: SR quill alloy
Headset: Ross pro
Chain: Shimano Uniglide 600
Freewheel: Maillard 14-32T
Derailleurs: Suntour AG 15 speed w/thumb shifters
Weight: 32 lbs.
Also included: Cushion grips



Detail: Force I



Detail: Force I



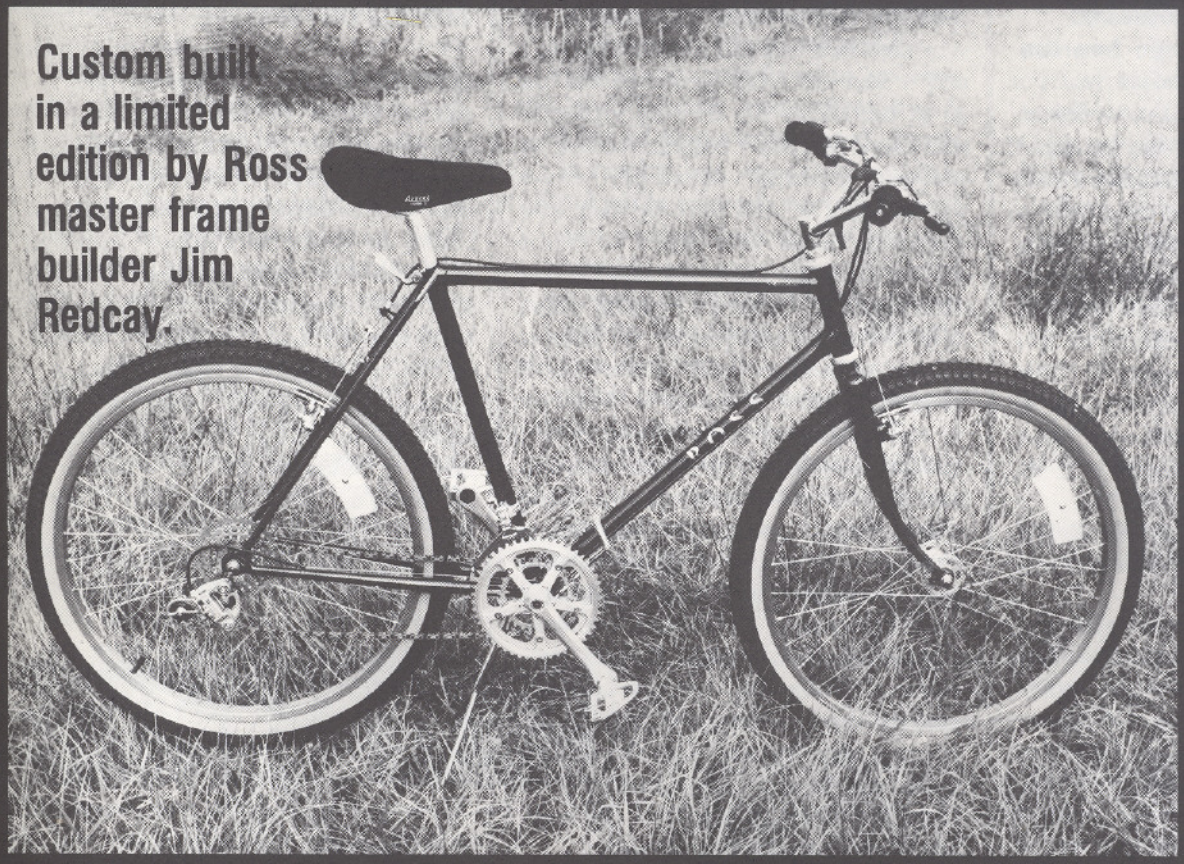
Detail: Redcay Mountain



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REDCAY MOUNTAIN

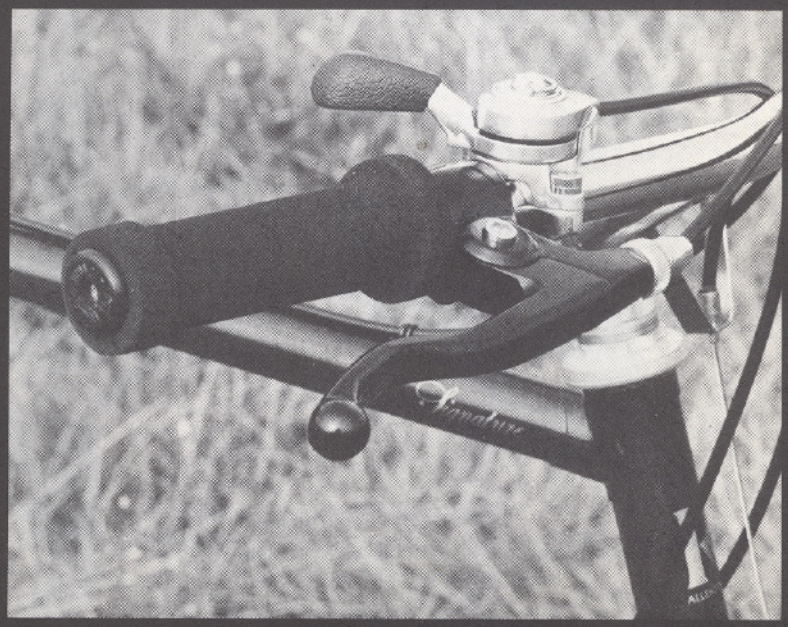
Model No.: 600
Color: To order
Frame Size: 19″ 21″
Tubing: Tange Chrome Moly-Mountain
Lugs & Bottom Bracket: Nikko
Crown: Tange
Dropout: Shimano Vertical
Rims: Ukai Gold Alloy
Tires: 26 x 2.125 Gumwall
Brakes: Shimano DeOre EX Cantilever
Crankset: Shimano DeOre 30-45-50
Stem: Nitto Cro-mo
Handlebar: Nitto Cro-mo
Hubs: DeOre—XT Sealed Mechanism
Saddle: Avocet Touring II
Seat Post: SR. Laprade
Pedals: DeOre Platform
Headset: Shamino 600 EX
Chain: Shimano Uniglide
Freewheel: Shimano DeOre 14-34
Derailleurs: Shimano DeOre-XT w/Shimano DeOre-XT Thumb Shifter
Weight: 31 lbs.
Extras: Cushion Grips, Braze-ons: Top tube cable guides. Water bottle mounts.

Detail: Redcay Mountain





Detail: Redcay Mountain



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Tech Tips by SeeKay

Let's talk handles--you know, that part of the bike you hang on to. There are several elements involved; the stem, handlebars, brake and shift levers and the grips, but we'll confine our attention here to just the handlebars.

First the stem: there are two standards for stem diameter, American (.833") and the rest of the world (22.2mm). All old-style curved-frame cruisers and BMX bikes use the .833" (approximately 21mm) size. The reason for the smaller size is that originally the steering tubes for these bikes were made out of cheaper steel, requiring a thicker wall. European racing bicycles have a chrome-moly steerer which requires less wall thickness, so the stem was slightly large, and this set the standard for all other bikes. All imported Fat Tire bikes and most of the better domestic versions use the 22.2mm standard, but if you're doing a conversion or using a BMX fork remember to use the .833.

Most Fat Tire riders use some version of flat handlebars, which were out of vogue for fifteen years or so while dropped bars were popular. Off-road riding requires more leverage for control and less emphasis on aerodynamic riding position than road cycling, and the flat bars make a convenient location for "thumbshifters" and motorcycle-type brake levers. High-rise bars are popular with the BMX set, but they are impractical for true cross-country riding. While a high bar allows the rider to "trim" the bike while airborne because it provides a long vertical lever arm, it makes climbing difficult because it shifts the rider's weight to the rear and pulls the front wheel off the ground on steep slopes. Also, high bars will not allow the rider to use his arms effectively while climbing because they shorten the extenion.

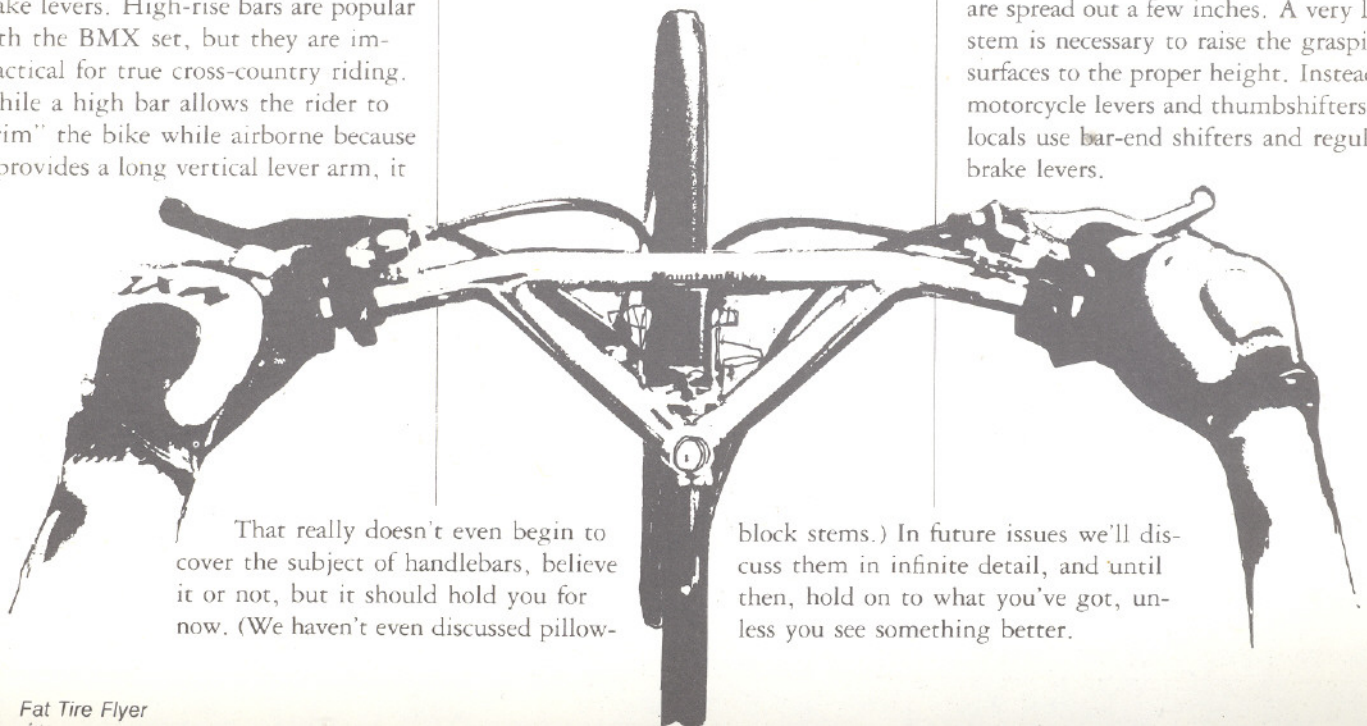
There are several innovative approaches to handlebars coming from American designers. Some of these have already been picked up on by the foreign manufacturers, and it looks as though they are the wave of the future. The problem off-road designers have faced is that this new type of bicycle requires a hand position that was not obtainable from traditional cycling equipment; also, off-road bars must be far stronger than the garden variety.

Tom Ritchey's "Bullmoose (TM)" and Jeff Lindsay's "Goat Bars" incorporate the stem into the handlebar, which means there is one less part to work loose. The other side of the coin is that there isn't much adjustment possible aside from raising or lowering the stem, a travel of about an inch. Ritchey also makes a "Bullmoose" bar that eliminates the use of a stem; a chrome-moly sleeve is silver-soldered into the steering tube, and the bars clamp directly onto that. This saves the weight of the long steel bolt found in most stems.

Motorcycle bars are popular with many builders, even though modifications are sometimes necessary to make them work. Magura, a German motorcycle parts company, makes an alloy trials handlebar that is popular, although most riders will cut them a little shorter than the 33" original length. The problem with these 7/8" diameter bars is how to attach them to the bike, because traditional road stem clamps are one inch or so. If the road stem is used, get a handlebar shim to make it fit. These come in two kinds, steel (cheap) and aluminum (expensive). The main advantage to an aluminum shim is that it is less likely to cut into the bar and weaken it at a high-stress point.

Instead of a traditional stem, custom frame builders such as Joe Breeze, Ross Schafer, and Steve Potts make a stem from chrome-moly that clamps onto a sleeve silver-soldered into the fork and also onto the bars. This allows the stem to be sloped upward, the opposite direction from a road stem, and puts the ends of the handlebars in the preferred zone. (This idea probably originated with Ritchey, who first used it on road bikes.)

The most radical handlebar treatment we've seen is the style popular in Crested Butte, Colorado. A pair of road drop-bars is used, but the lower ends are spread out a few inches. A very long stem is necessary to raise the grasping surfaces to the proper height. Instead of motorcycle levers and thumbshifters the locals use bar-end shifters and regular brake levers.



That really doesn't even begin to cover the subject of handlebars, believe it or not, but it should hold you for now. (We haven't even discussed pillow-block stems.) In future issues we'll discuss them in infinite detail, and until then, hold on to what you've got, unless you see something better.

NATIONAL ORGANIZATION FORMING

Regular subscribers will have noticed the inclusion in last month's issue of a sheet announcing the formation of the National Off-Road Bicycle Association. While the FAT TIRE FLYER is not directly involved with this organization, we have agreed to help them get off the ground by distributing literature and sending a free issue to new members who aren't already subscribers.

The announced purposes of the Association (NORBA for short) include lobbying for access to public lands, and sanctioning off-road racing. The latter purpose is becoming important as more and more competitve events are staged and run into difficulties with access for reasons of either government policy or lack of insurance. The advantage of a national body is that insurance for races, a major ingredient to getting permission to use public lands, would be available to race promoters at a reasonable cost. Aside from the access issue, any race promoter would be well advised in litigation-oriented culture to be covered by some kind of insurance, and NORBA will be in a good position to supply it.

The race sanctioning aspect of NORBA is tied to insurance in several ways. As mentioned, rates can be kept lower if a large number of participants and events are covered by the same policy. One policy, for instance, will cover any number of participants and events for a premium of some $750 a year. Compare this to the fact that individuals who promote only one race a year currently have to pay premiums of up to several hundred dollars to insure that event. Before an insurance company will take on this kind of policy, they want to know that some minimum precautions are taken to keep participants alive, a factor not usually considered by participants but essential to underwriters. The essence of all this verbosity is that they want to see a set of more or less standard rules that require riders have two things, a stopping device (commonly known as a brake), and something slightly stiffer than a fedora (a panama perhaps) for head protection. (Notice that we didn't say "helmet.")

The off-road bicycling movement will need representation in government circles, essentially a lobbying body to influence legislation that affects our bicycling activities, and for obvious reasons a national body represnting a variety of constituencies will be the most effective. Other sporting groups who use the same lands, such as equestrians, motorcyclists, and hikers, have lobbying organizations which occasionally work at cross-purposes to the interests of bicyclists, and it is essential that we have a voice where important decisions are being made.

According to spokesman Jack Ingram of Concord, California, a set of simple rules has been drawn up by the

Continued on page 16

T-SHIRT!



Fat Tire Flyer T-shirts are now available,printed in four colors on light blue heavy-duty 100% cotton shirts. The low, low price is $8.75

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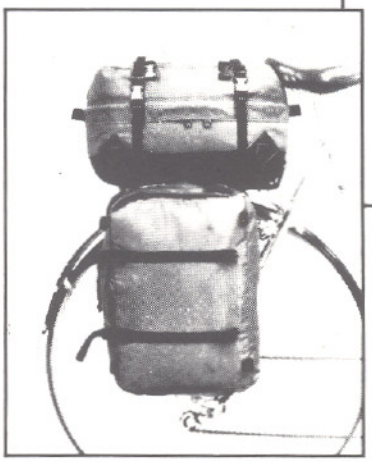
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PRODUCT RELEASES

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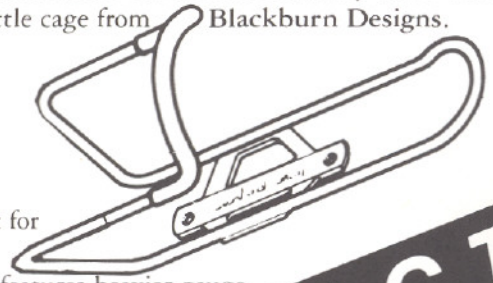


The "Odyssey" from **Paul Larson Products** is a system of three bags which can be assembled in several ways, as a bicycle touring bag set, as a backpack, and as a traveling bag. According to the manufacturer no pains are spared in using the highest quality materials, including the strongest zippers made, in order to make the system rugged and long-lasting. Both the backpack and pannier configurations are designed for maximum function. The backpack has an internal stiffener as found in the best mountaineering packs, and the panniers are designed to be waterproof under deluge conditions.

(A product review of the Odyssey will appear in a future issue of the FTF.)

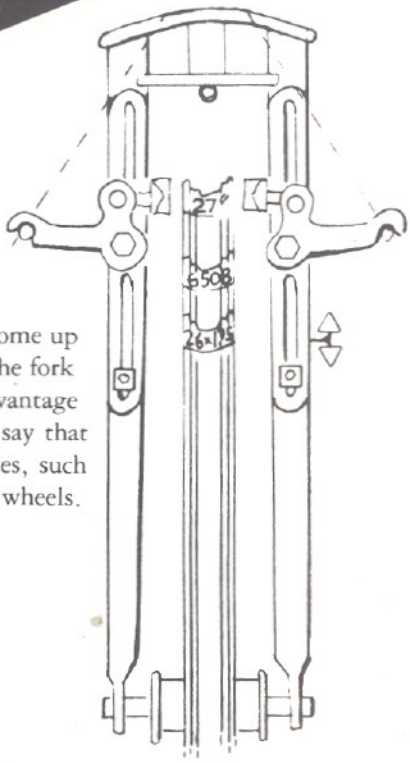
BLACKBURN BX-1 BOTTLE CASE

Anyone who has reached the bottom of a rough downhill and reached for his/her bottle full of cool, refreshing liquid, only to find that it has evacuated halfway down will appreciate this bottle cage from **Blackburn Designs**.

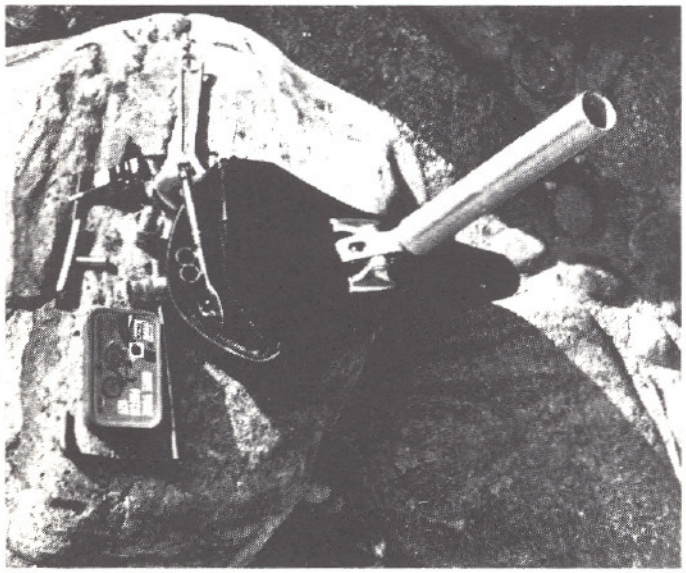


Made just for off-road riders, it features heavier gauge tubing for a tighter grip on the container.

MOOT'S MOUNTS

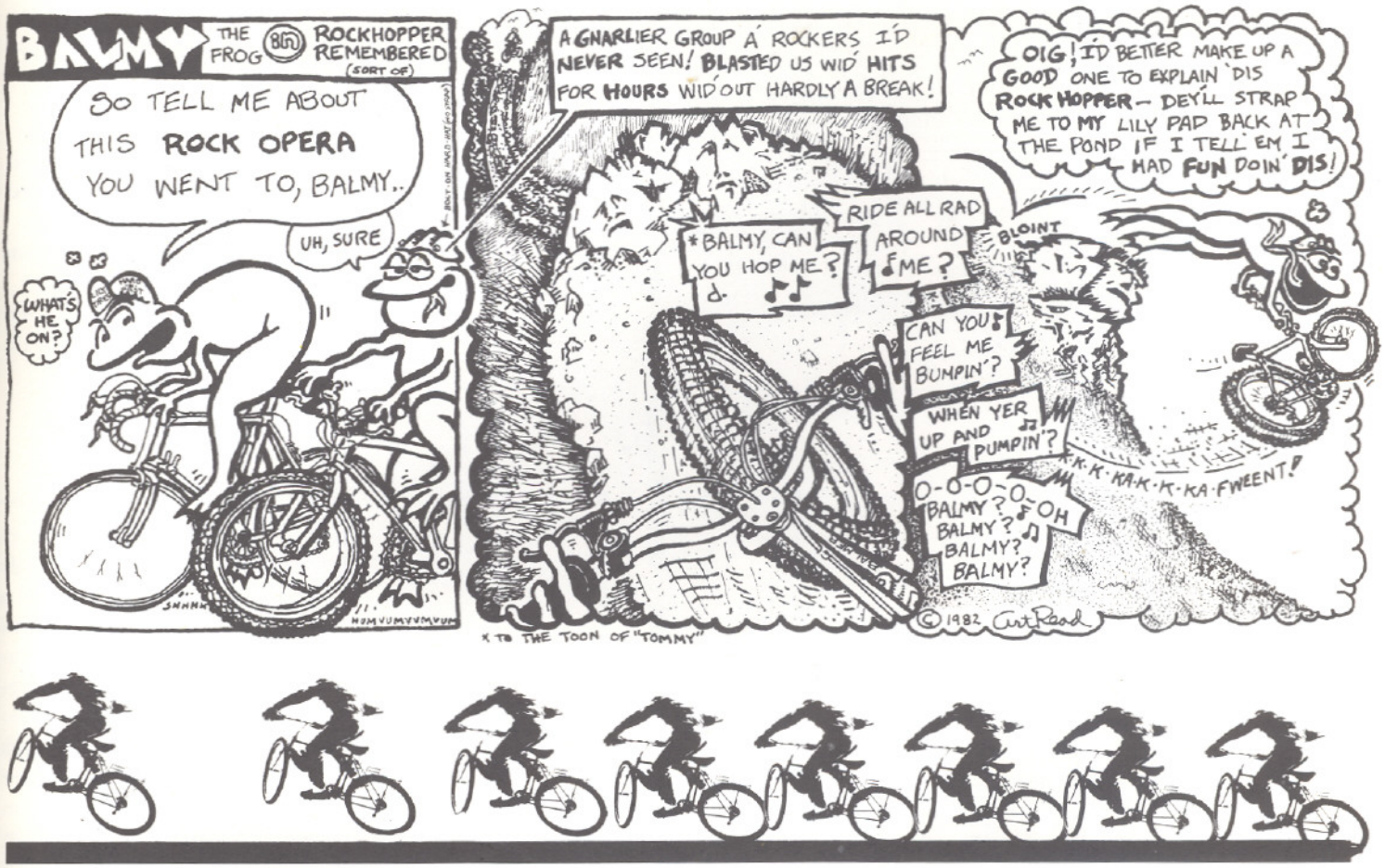


Moot's Mountain of Steamboat, Colorado, has come up with this mount for cantilever brakes that bolts onto the fork instead of being brazed on. Aside from the obvious advantage of reducing the complexity of mounting, the makers say that they can be moved to accommodate different wheel sizes, such as 650B, 27", and the standard of the industry, 26" wheels.



APPROPRIATE DESIGNS SADDLE

This saddle from **Appropriate Designs** is similar to most other saddles, with one major difference. Underneath there is a small pocket between the rails, with a zipper closure; the obvious stash for tools, small spare parts, and any other small stashables.



GLOSSARY

Every sport or activity develops its own slang, and Fat Tire Flying is no different. We could quit there, because that statement stands by itself, but any reader of specialty magazines knows what is coming next: The Glossary. In our typical meddlesome way we have gathered some of the expressions inspired by clunking (an intransitive verb meaning {in the infinitive form} "to ride a Fat Tire Bike on poor road surfaces") into something that resembles an article, but is not.

Airborne: *adjective:* good or bad, depending on whether performed with or without the bicycle.

Bail out: *intransitive verb:* 1. to give up on the thought of ever again controlling the machine; 2. to empty boots and/or backpack after unsuccessful stream crossing. 3. to be released from temporary incarceration following a minor infraction like I didn't even see the "no trespassing" sign.

Boge (bogue): *adjective (from bogus):* 1. Not as advertised, as in "Hey, this (brand name) derailleur (brake, wheel, tire) is boge..."

Brand X: *noun:* any type of bike other than your own.

Cha mon: all purpose greeting or departing statement.

Clunk (see introduction): *intransitive verb:* "To ride a bicycle in the hills."

Clunk: *noun:* refers to sound made by any number of mechanical difficulties, e.g. derailleur falling off, wheel collapsing, etc.

Clunker: *noun:* a Fat Tire Bike usually composed of the surviving fragments of three old one-speeds and two ten-speeds.

Clunquer, clunquette: *nouns:* from the original French, one who clunques.

Cross-up: *transitive verb;* 1. to steer in the opposite direction of the turn while sliding; 2. to promise to meet the gang at eleven at the bike shop and then show up an hour late and stand on the wrong corner.

Cruisen: *adjective;* describes a state of Fat Tire euphoria, usually used with the word "be" as in "always be cruisen."

Dirt: *noun;* the surface of most good roads. Has been shown in many instances to be stronger than bikes.

Eat it: *intransitive verb;* to make a sudden and close inspection of the road surface, and use the opportunity to have lunch.

Flat tire: *noun:* an incredible inconvenience because you probably left your pump home.

Fork: *noun:* 1. part of the bicycle holding the front wheel; 2. a place where two roads join and that must be where we got lost.

Gnarly (knarly, narly, etc.): *adjective:* so difficult that it's fun.

Jungle-cross: *noun:* any route so overgrown that it requires a long bicycle carry.

Mulch: *transitive verb:* to restore any bicycle component to the elemental state it occupied just before the final manufacturing step; "I mulched my derailleur."

Sideways: *adjective:* defines one of the outer limits of Fat Tire Fun. The good ol' white-knuckle corner technique.

Skinny-tired: *adjective:* describes an exhausted and underweight individual.

Tire: *intransitive verb:* to feel exhausted before a ride is even half over.

Tire: *noun:* the interface between bicycle and road. Usually used with the adjective "fat."

Transpo: *noun:* method of travel, such as a "clunker" (see above).

Wheelie: *noun:* a maneuver with no practical applications.

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from your own, I appreciate what you are doing and your enthusiasm for same.

I might add that I do actually ride most of my rideable bicycles and try to rotate so that all are given exercise at least once a year. Since I'm not out to grab the land speed record (few really are), I enjoy going for a leisurely cruise on one of my classic bicycles and never have to worry about getting caught in a sewer grate or cracks in the pavement, etc. It's also a pleasure to sit on a seat which doesn't resemble a vinyl-covered 2x4!

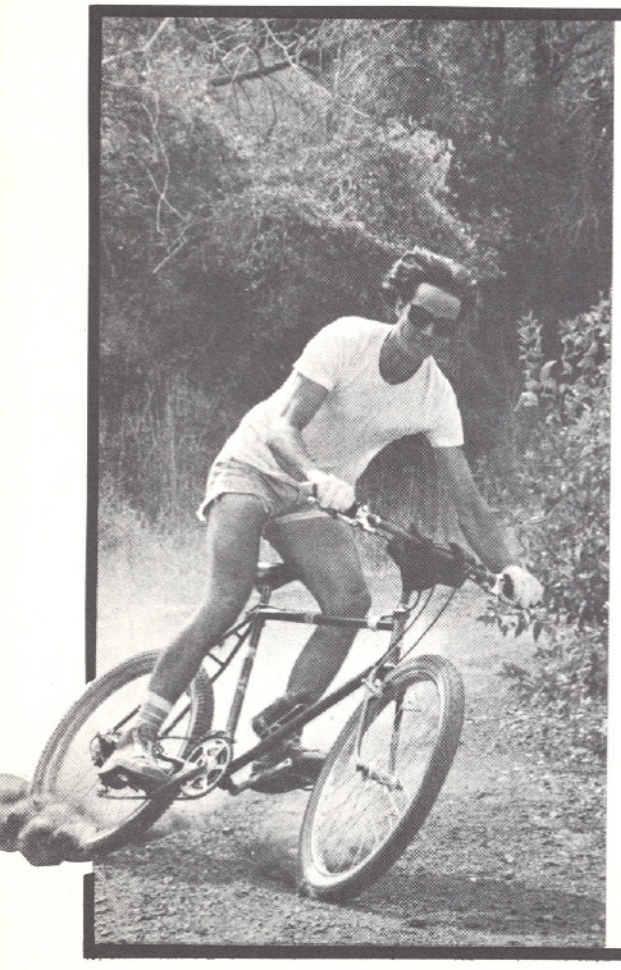
Thanks again. Happy Bicycling,
Leon Dixon

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organizing committee, which wil be in effect for sanctioned events until a truly national meeting can be arranged and a finalized version of race rules worked out. The current rules are short and include the headgear and brake requirement as well as a few rules against unlimited bicycle substitution. Although the members of the ad hoc committee are all from Northern California, Ingram says that Fat Tire folks from all over the country have expressed interest, as well as some from other countries, and that a national network of chapters would be necessary for the organization to be a representative body. Other areas where interest is strong in Fat Tire bikes include all the Rocky Mountain states and the West Coast, and there are regional groups forming, if only for the purpose of riding together, in many other areas such as New England, Florida, Texas, and Pennsylvania. Local groups will be the key to success says Ingram, because members must have a voice in the organization to make it effective.

Membership incentives for competitive riders include the possibility of true national championships to settle the issue once and for all (one year at a time, that is), who is the gnarliest Fat Tire jockey in the land. Regional point schemes have also been proposed so locals can get together for all-season long dirt chewing.

Here at the FLYER we'll stick our necks out a little and say that we think a national organization is not only necessary, but also inevitable, and we wish NORBA success. For further information you can write them (send a stamped, self addressed envelope) at N.O.R.B.A., P.O. Box 5513, Mill Valley, California 94942.



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Dear Ladies and Gentlemen of the FAT TIRE FLYER;

I've discovered a gold mine! Tony Brown showed me some back issues of the FAT TIRE FLYER and really turned me on to something magnificent. Enclosed is my check for the first of many years of subscription to the best newsletter I've seen yet. For many years I always knew there was rasta rock and ice climbing and rasta telemark skiing. But Ricky Cha (my new idol) has convinced me to expand the dimensions a bit further--Montana is turning to Rasta Mountain Biking and HOW! And these Mudpups; could I have one sent here to raise as my very own? My homebuilt (Schwinn framed) Fat Tire Bike currently sports a 6" tall plastic "Speedy Gonzales" on the handlebars. But Speedy is lonely and getting cold at night--everyone needs a mate to stay warm with; the onslaught of another cold Montana winter is upon us (we're getting our studded tires set up).

Anyway, I think the FTF is fabulous--just flipping through the pages sends hot rushes from the core of my body and electrifying chills down my spine . . . soon I'm panting, sweating profusely, quivering ecstatically; all-over tension mounts until all of a sudden, Oh . . . Oh Baby, I just got to get on my Fat Tire bike and get off on a wild ride down any of the trails or old logging roads that lace the National Forest lands that border Missoula. If the bike and I survive, we return to domestic responsibilities, only temporarily satisfied.

Fat Tire bikes have just begun to catch on up here (we're kind of slow to changes). One local bike shop which deals in "Stumpjumpers" has been selling them like they're going out of style . . . they definitely outnumber all other Fat Tire bikes in town by about 3 to 1. My guess is that there are currently only 100 clunkers in Missoula of all kinds. I've only seen one Ritchey "MountainBike," which is owned by Kent Spence.

There is beginning to be some air of dissatisfaction over the fact that bicycles are now allowed in areas designated as "Wilderness" by the 1964 Wilderness Act or in areas that are currently being considered for Wilderness designation (called Wilderness Study Areas). One of the main uses I've found for my bike is to haul loads of hardware and equipment for big wall climbing into various canyons of the Bitterroot and Beartooth Ranges (Shh . . . not too loud, or we'll have all those El Cap climbers from the Valley up here bagging our first ascents). Unfortunately the big walls are located within the Absarokee-Beartooth Wilderness Area and the Selway-Bitterroot Wilderness Area, which lie on the Montana-Idaho border. Steve Saroff of Missoula also rode out of the Rattlesnake Wilderness Area last week, hauling a winter's supply of venison. (50 lb. is a lot of excess baggage for a Fat Tire rider.)

In all of my wilderness riding I have only encountered one ranger. I managed to get away with a fine because I cried, pleaded ignorance, and shined his boots! I explained to him that the sign posted at the trailhead reads "No Motorcycles or Motorized Vehicles," and that I thought that Speedy and I qualified under neither of those categories. He responded that, even though the sign did not specify bicycles, page 4 of the Wilderness Act (PL88-577) prohibits the use of motor vehicles . . . and other forms of mechanical transport (bicycles, hang gliders, etc.). I argued that bicycles have almost no ecological or environmental impact--certainly not to the degree that horses tear up wilderness trails and campsites. (The soil compaction and vegetation loss attributed to the occasional horse party is deplorable . . . you ought to see some of the stuff they get away with because they are not mechanical forms of transport.)

Arguing with the ranger did little more than make him mad. He threatened to nail me with a fine, so I calmed down and spoke to him in an intelligent manner about recreation management issues such as carrying capacity, impact assessment, levels of appropriate use and kinds of use in the wilderness and so on. I realized that he knew little about recration management and the contemporary issues and problems associated with the agency management of wilderness. (I had just finished writing a research paper on some current problems in establishing wilderness carrying capacities for a Wilderness Management class and I was easily in a position to blow him away with the products of my research.) All he did was suggest that I write my Senator and Congressman, which I did, and to stay out of Wilderness Areas on my bike.

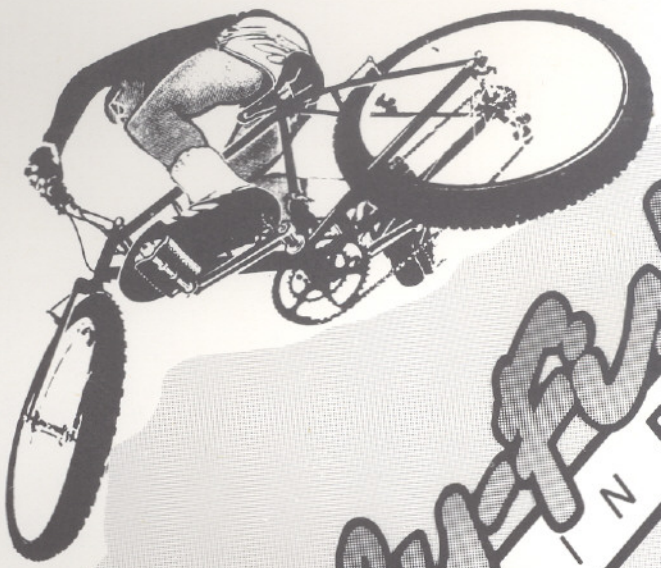
I've concluded from all this that policies in wilderness management are deeply rooted in the premises set forth by the Wilderness Act of 1964, and that to change those policies in favor of the cyclist would be like pulling teeth; not likely to happen unless more than half the US takes up Fat Tire riding and expresses a unanimous demand for legislation that would modify the policies set by the Wilderness Act.

Meanwhile, I'm planning on continuing to ride (occasionally) in Wilderness areas and risk a fine or jail. I'm planning on seeking out National Forest lands and BLM lands which aren't designated Wilderness for future riding for pleasure riding rather than approach-to-climbs riding. Next summer I'm hoping to get away with riding across the Bob Marshall Wilderness Area; the trails are mellow and the ranger patrols almost nonexistent. There is much irony in my saying that too many good riding areas in Western Montana are designated "Wilderness"--that so much wilderness exists is something that I should be proud of having so close to home. But for bicycling it's king of a pain. Sorry for complaining for half of this letter.

At present we have no organized clunker race or tour events around these parts; perhaps in the springtime we can figure out some good routes. Tony and I are compiling some lists of excellent possible tours and races, but we haven't even seen these routes except on maps. As soon as we get some events together we'll keep you posted so the FLYER can spread the word. I'll see if I can come up with an article or something of interest for the FTF. Tony should be sending you one on winterizing your tires.

Bye bye and happy riding.
Kurt Kleiner

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The FAT TIRE FLYER understands your concern regarding Fat Tire riding because it comes from people who ride Fat Tire bikes. We are timely, informative and aware of the things that you need to know to keep you on top of off-road riding, racing, touring, commuting; all aspects of Fat Tires and all applications.



Greg Westergaard