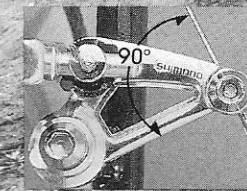


Fat Tire Flyer™



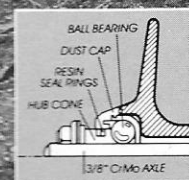
THROUGH
THE MOUNTAINS
OR OVER THEM...



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

bosses (including Mafac), the XT brake arch is buffressed 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.

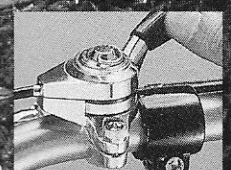
XT large flange alloy hubs are special, too, rolling on 3/8" chromoly axles.



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

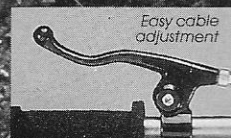
and featuring Shimano's revolutionary new sealed design. Double-ring seals at both ends completely seal

Unshift ratchet action makes Deore XT thumb shifters foolproof and easy to use.



the entire hub from damaging dirt and moisture without sacrificing serviceability.

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.

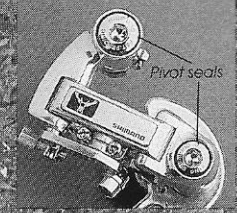
Standard Deore and Shimano 600 Series levers are available for touring bicycles.

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

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,

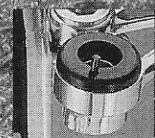


sealed at the pivots and This light alloy long cage Deore XT derailleur has special dirt seals for increased reliability.

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 decel-

eration, with the all-new MC70 cantilever brakes. Cleverly designed and fully adjustable to fit all popular



DEORE XT

TOURING AND OFF ROAD
COMPONENTS



Fat Tire Flyer™

P.O. BOX 757, FAIRFAX, CA. 94930

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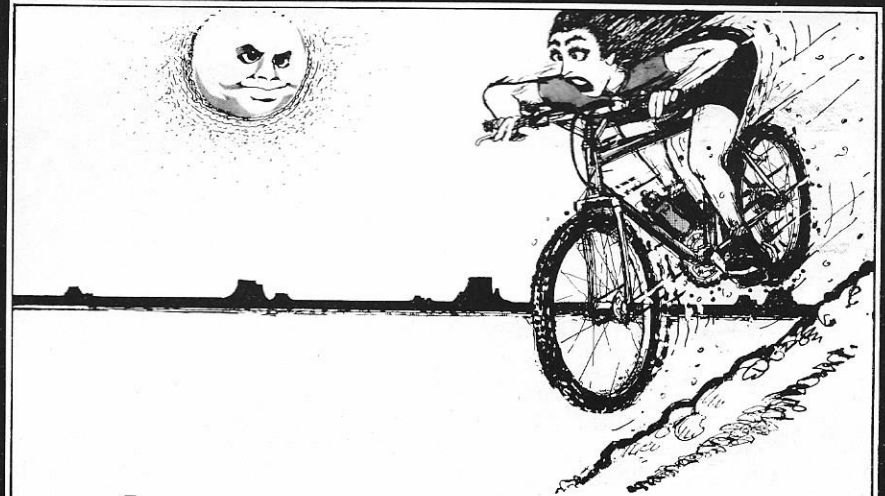
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COVER PHOTO

CLARK ROBERTS smells mud
at Carlsbad.
Photo by Jo Hadley Photography



JULY/AUGUST 1983 • VOL. 3, NO. 4



- 4 EDITORIAL** Racing reflections.
- 5 FAT FEEDBACK** Readers demand equal tire.
- 6 OF BIKES AND MEN...** by Catherine Wells
Trail torture in Tucson.
- 8 COMING EVENTS** A big Fall is coming up.
- 10 BRAKES PRODUCT REVIEW** by Glenn Odell
Stopping power for the Fat masses.
- 14 TECH TIPS** by SeeKay
The Bunny Hop and its place in history.
- 16 FRAMES-WHY CUSTOM?**
Why not?
- 17 MUDPUP** by Kevin Coffey
City Dog-Country Pup
- 18 RACE REPORT** Moto cross-ed up.
- 19 BACK ISSUES** Just send money.
- 20 FAT NOTES** All the news that's Fat to print.
- 21 POETRY CORNER** Dirty Doggerel.
- 22 "JUST WHEN YOU THOUGHT IT WAS SAFE
TO GO BACK IN THE WATER..."**

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Editorial

At recent races we couldn't help being aware of an emerging class of riders, the factory pros. Although by no means do they completely dominate the sport . . . yet . . . riders good enough to compete with them will also be offered paid rides, until it becomes unlikely that an unknown rider wins a major event. Right now there are only about half-a-dozen teams, but that number is about to go way up. Since there are literally no rules regarding this, it is wide open and heavily influenced by the BMX pro scene, which like off-road racing but unlike road racing, is not governed by an international organization geared toward Olympic amateur status.



Dave Kalemba

Like any other issue, there are two sides to this. On the positive side, it is helpful that this much factory competition is there, since it will help develop better bikes and components. Manufacturers sponsor riders for one reason, and that is exposure. This sport, like it or not, is about to go first-class legit with TV coverage, press coverage (besides the FLYER), trading cards, you name it. The manufacturers are now enlisted in the access-to-lands issue, and it can't hurt to have that kind of money and public relations on our side.

On the other side, some riders may feel that they get cheated if they have to compete against others who get free bikes, travel money, start money and win money.

It's too late to stem this particular tide; it is inevitable now. That being the case, we should look at the positive aspects while relieving if we can the major or only negative aspect, the issue of paid riders competing with amateurs.

It seems obvious that races will need to be broken down into at least a few groups, if only to make the starts a little less crazy. We feel that pros, that is anyone who gets paid to start or win a race, or who gets a free bike, should only race against each other.

One refreshing aspect of recent races is the "race-tour" format; if you want to race, go race, but if you want to take a cruise with full support and sweep, you can do that in great company. This attitude is exemplified by the woman who recently charged across the finish line and was told she was the women's winner. "Oh my," she said, "I only wanted to go for a ride!"

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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Fat Tire Flyer™



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Fat Feedback

Dear Flyers,

I just got my first issue--yeehah! It's great not to have to wade through 150 pages of touring drivel and motivational cycling hooley to read an article about mountain bikes.

How about an article on riders north of California? Oregon's got some guys who truly rip and tear! Also, some interviews with mountain bike innovators, i.e. Gary Fisher, Jeff Lindsay, Joe Breeze, would be very interesting and informative.

It would be appreciated if you could pass the word that Portland finally has a mountain bike club, Cascade Clunkers. It's a casual organization that acts as an information exchange and gives local riders the chance to meet each other and ride together.

Those seeking further information about this may write or call Eric Wolf, 7353 Southwest Nevada Terrace, Portland OR, 97219. (503-244-4037)

Thanks for your help. Good luck and keep up the high standards you have set.

Eric

Dear Editor

As a recent owner of a mtn bike, having toured for fifteen years, I very much look forward to receiving your publication. My knowledge level is somewhat limited and therefore articles on technique and equipment are most appreciated. You and your colleagues are to be congratulated for your dedication in producing such a fine publication. It must be satisfying (or scary) to see the mtn bike phenomenon gain such rapid popularity over the last two years.

In our city the mtn bike craze is just catching on this year. We are fortunate to have four national parks and numerous fire roads near Calgary. Very few people know much about these contraptions up here. We are kind of on our own.

Best wishes on your endeavors. You have a growing "information-hungry" readership in our area.

Dean Roberts
Calgary, Alberta, Canada

Editor;

I have been a avid off-road bicyclist for many years and I am glad to see there is a publication catering to our strange pursuits. I built my first off-road bike (what I would have given for some alloy rims!!!) in 1967 when I lived in Pacific Palisades. I used to ride the fire trails in what is now Santa Monica State Park.

I am now living here in North Florida (Baja Georgia, really) and I must say it is a wonderful place for fat-tire bikes. Miles and miles of dirt roads and trails and by no means just flat land. We sure don't have any mountains but we do have lots of hills and many of these are very steep. They can be quite a challenge after a rain. This red clay around here gets very slippery when it gets wet. I still haven't made up my mind whether slippery red clay or fine dry sand makes for the most difficult riding.

I am a field biologist and I use my bike continuously to get around my 3000 acre study site. We have over 20 miles of dirt road and trails and I ride a minimum of about 50 miles per week. I am about half finished with a frame that will have a swinging fork suspension front and rear and I am very anxious to see how it turns out. I would be interested in communicating with anyone else experimenting with suspensions for bicycles, do you know of any such person? Also, is there any way to get back issues of your publication?

L.J. Shields
6950 Bradfordville Road
Tallahassee, FL 32308

Dear Fat Tire Flyer Folks,

I am very excited to find out about your publication. I live on Washington's Olympic Peninsula and we are really in the "boonies" (if not the dark ages) as far as bikes are concerned.

I own a mountain bike, which I love, but I'm really frustrated with the bike shop situation here. Nobody knows anything about mountain bikes, or what is available for them, like accessories or replacement parts. I would really appreciate any information you could supply me with, like mail order suppliers or other publications like yours, brochures or ANYTHING!!

I am even considering starting my own shop specializing in "fat tire" bikes since no one else has yet. I'm sure they will catch on here in the future.

Craig Houghtaling
Port Angeles, WA

Fat Tire Flyer;

Bicycling is my love and my life. For the past 20 years I've been riding ten speed bikes with drop-bars and high-pressure tires, and thinking, "Boy, cycling was not like this when I was a kid." It wasn't; I had a J.C. Higgins and I sat up straight. But I can't remember breaking a spoke, or all the fat tires I seem to get with the high-pressure

Continued on page 19

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OF BIKES AND MEN ... PLUS ONE CRAZY LADY!

by Catherine Wells

I'm limping around the house this morning with a twisted ankle, scarred knees, and bruises from toe to hip. The muscles in my shoulders and upper arms snarl at me every time I try to use them, and I find it a lot easier if I let my six-year-old daughter tie my shoes.

But, boy, I had fun.

It was Errol's idea that I come along as he and three friends tackled a local hiking trail on their mountain bikes. I had gotten my Stumpjumper Sport two weeks before our of self-preservation and love--the route I wanted to take to work is as beat-up and patched as a stretch of two-lane road can be, and I had no desire to kill myself or to damage my beloved Trek by tackling such a minefield during rush hour. So I had ridden my Fat-Tired steed only four times on pock-marked, but paved, road when I decided to join the boys on their off-road adventure through Romero Canyon in Catalina State Park.

It was early March in Tucson, meaning the afternoon high would reach the 80's, so I was in short sleeves and cycling shorts. Considering that anything onery enough to grow in this climate is onery enough to bite, I wondered if exposing so much bare flesh was a mistake. The ocotillo had not "leafed out" yet; they were thorn-covered sticks jutting in clusters to the sky, and sections of prickly pear lay about in unpredictable places. Then there's the legendary "jumping" cholla ... but I don't believe in that.

We left our vehicles at the park entrance. The dramatic outline of Pusch Ridge lay just to the east; centuries ago the Hohokum had lived in its shadow.

The first part of the trail was about what I expected, gravel, rocks, grass and some sand. I learned quickly to "ride the ridge," taking my half out of the middle, between the sandy wheel tracks. Traction is much better on grass than on sand (Yes, Virginia, there is grass in Arizona. In some places.) I also learned that when the sand can't be avoided, you get up your speed in advance, gear down, and DON'T STOP PEDALING. Momentum is your only friend, and he who hesitates goes down.

I managed not to lag too far behind, although it had been months since I'd done any regular riding. Errol cheered me on as I conquered my first extended stretch of loose sand, teetering like a tipsy trooper all the way. "You did it!" he cried as I clambered onto the firm ground beyond.

I looked at him. "You sound surprised," I said, with perhaps the smallest trace of resentment in my voice.

I didn't do so well as I approached the wash. Now, on a March day when spring runoff has produced a gentle trickle 12 feet across and eight to ten inches deep, hikers can take stepping stones. They can even hesitate in the middle, choosing their next steps with care. But a Fat Tire bike has to roar down 30 feet of fine, loose sand, barrel through the water, slog through more sand, and bounce to a stop at the base of a rock-strewn hill.

I didn't make it.

I bogged down in the first stretch of sand, but managed to get going again--no easy feat--before I hit the water. I'd lost my speed though, and landed with my toes in the water just on the other bank.

Then there was that hill. Forty-five degrees would be a conservative estimate, and 60 would be closer. We all tried it; we all walked.

Back in the saddle, we started along a dirt path that now seemed less rugged by comparison, although loose sand abounded and washouts were dotted with large rocks. I lost my balance once or twice but landed on my feet. Once I did a quick halt to avoid running into an

ocotillo, and I walked through a few patches of sand where I couldn't get the traction to remount. But I always caught up to the boys as they stood huffing and puffing in the increasingly warm afternoon sun.

Then we hit the rough stuff.

Dealing with sand and rocks is one thing. But dealing with sand, rocks and cactus... The trail was so narrow and rocky that I gave up and pushed my bike because I couldn't control the fork well enough to keep from running into the hazardous vegetation crowding in on both sides. Besides that, I was pooped, and this trail was going steadily uphill. But I was not the only one on foot as we came to the edge of the ravine.

Oh yes, the ravine. Filled with prickly pear, fallen ocotillo, catclaws and other species of Arizona's welcome mat, it sported a rock-filled crease laughingly known as a trail, which descended at an even sharper angle than the one we'd come up by the wash. "Now we can ride again," Kevin announced. I watched unbelievably as one by one the four guys disappeared over the brink. Then I straddled my bike, staring at the rocks the size of my head wedged between thorns and thickets, all dropping away at an unbelievable pitch.

"Forget it," I said, and got off my bike.

It may be easier to ride down something like that than to go afoot holding the reins of a 28 pound bicycle. I incurred several bruises and one bike bite before arriving at the bottom where the fellows were trying to get enough of a run to get part way up the other side.

We walked up that one, too. And hauled our bikes. Who says cycling doesn't develop your arms?

Over a few more boulders and cactus and we were at the base of Moss Rock. Errol dug a 3/8" prickly pear thorn out of his foot (it had gone through his sneaker) and we left the bikes there while we walked down to the water. (Water!) After scrambling around on a few more hiking side trips and pausing to watch a red-tailed hawk soar against the magnificent sky, we returned to our bikes and prepared to head back.

As we were doing so, two horseback riders came up the trail. "All right, I'll ask a dumb question," said one cowboy. "How'd you get those bikes up here?"

The same way we got them back.

I did more riding this time. Once across the ravine, the slight downhill eliminated the need to pedal and it was easier to concentrate on steering. I discovered in a rush that descending was not only possible but also fun, and touching a foot to the ground in moments of crisis helped keep me upright from the ravine to the wash.

I even did well down that steep slope toward the wash when a strange noise stopped me, pronto. My chain had bounced down and gotten caught between the frame and the freewheel. Shifting gears solved the problem, and I arrived at the base of the slope in style.

Here we all stopped to regroup and catch our breaths before tackling the wash. We needed to start part way up the slope to get enough of a run to cross the sand and hit the water with speed. Don went first.

The water sprayed more than we expected as he charged across and made it twenty feet into the sand on the other side before his bike bogged down completely. To our amazement and amusement, it continued standing when he walked away from it, the sand forming a natural vise.

Kevin went next, with as much success and as much spray. Errol followed; "This water is deeper than it was before!" he cried when he reached the far side.

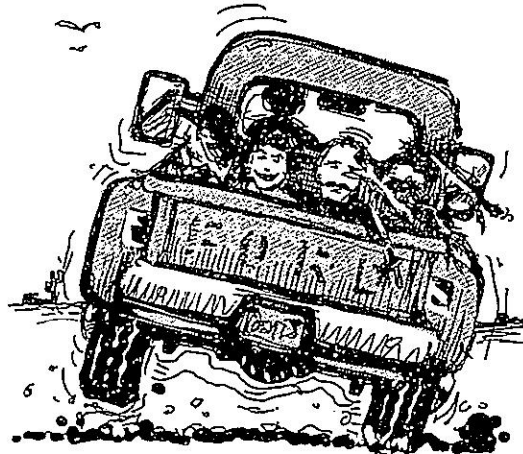
I didn't want to be the last fool, so I mounted and started for the wash. I hit it with enough speed, but I didn't see the submerged rocks until I was on top of them. Once you hit rocks or sand, there's no steering, and when I hit both there was nothing to do but pedal and try to hold the fork straight. I bounced and slogged across and into the sand on the other side, with Errol's cries of exultation ringing in my ears.

That's where I went down and twisted my ankle.

The rest of the road was fairly smooth. Smooth? My, how one's perspective changes. Oh, I did get a flat tire, but we were almost back at our starting point, and a little air saw me through to the finish.

Exhausted, I drained the last drop from my water bottle and eased myself gingerly into the back of Don's truck, surveying my swelling ankle. The boys were talking about another ride. Somewhere in the Rincons. "How about in two weeks?" someone suggested.

I looked up at the four crazy bikers. "Sounds good to me," I said.



Coming Events
Coming Events
Coming Events



AUGUST

August 20-September 14, tour. Mongolia Overland-China Passage.
 Contact: Angel, 206-527-4822
 Josh, 206-625-5177
 China Passage, 800-223-7196

SEPTEMBER

Sunday, September 4, race. Dirt Time Trial, Plymouth, NH. Contact: White Mountain Cycles (above)

September 10 & 11 (Sat/Sun), race. Sespe Hot Springs 2-stage. Contact: Victor Vincente of America, 213-VVA-3300

September 12-18. Fat Tire Bike Week. Crested Butte, CO.
 Sept. 12, 13, 14, Organized tours.
 Sept. 15, Orienteering and Bike Rodeo.
 Friday, September 16, race. Paradise Divide Fat Tire Stage Race, Crested Butte, CO.
 September 17 & 18 (Sat/Sun), tour. Eighth Annual Crested Butte to Aspen Tour.
 September 15-17, Exposition. Concurrent with other activities, Fat Tire Expo and Display.
 Contact: Murdock, 303-349-6761

September 23 & 24 (Fri/Sat), tour. Dirty Dawg Open Tour, Plymouth, NH. Contact: White Mountain Cycles 800-223-5001

OCTOBER

October 7-9. 2nd Annual Peaks Bomber Bust. Flagstaff, AZ.
 October 7, race. October 8 & 9, tour.
 Contact: Scott Stevenson
 808 West Summit, Flagstaff, AZ.

Sunday, October 9, race. Mount Lemon Hillclimb, Tuscon, AZ. Contact: Ric at Gordon's Bike Shop, 602-326-4652

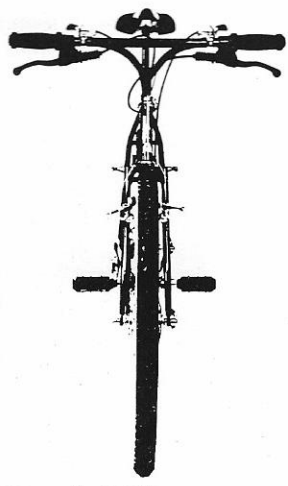
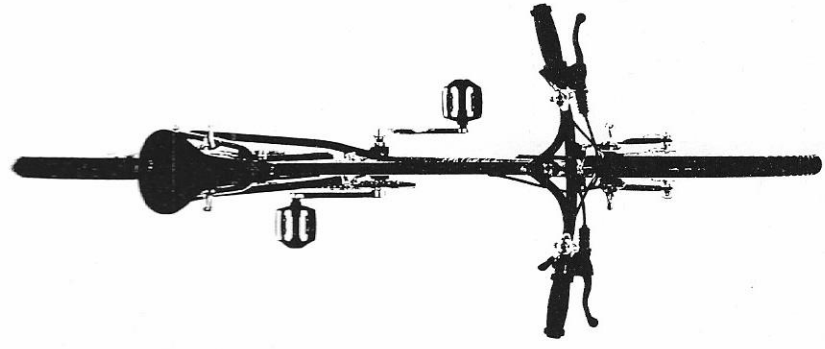
Sunday, October 9, race. Rockhopper, Santa Rosa, CA. Contact: Lynn Woznicki, 707-527-5864

October 15 & 16 (Sat/Sun), race. San Juan Cup Stage Race.
 Contact: Tibor Fischl, Mountain Bicycle Racing Promotions. 3020 Newport Blvd., Newport Beach, CA 92663, (714) 499-4946

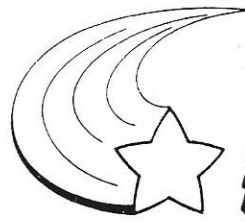
NOVEMBER

Sunday, November 13, race. Puerco! Off-Road Bike Classic. Contact: Victor Vincente of America, 213-VVA-3300

Thursday, November 24, ride. Ninth Annual Thanksgiving Day Appetite Seminar, Fairfax, CA. Contact: Charles Kelly, 415-457-7016



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 When you take a . . .



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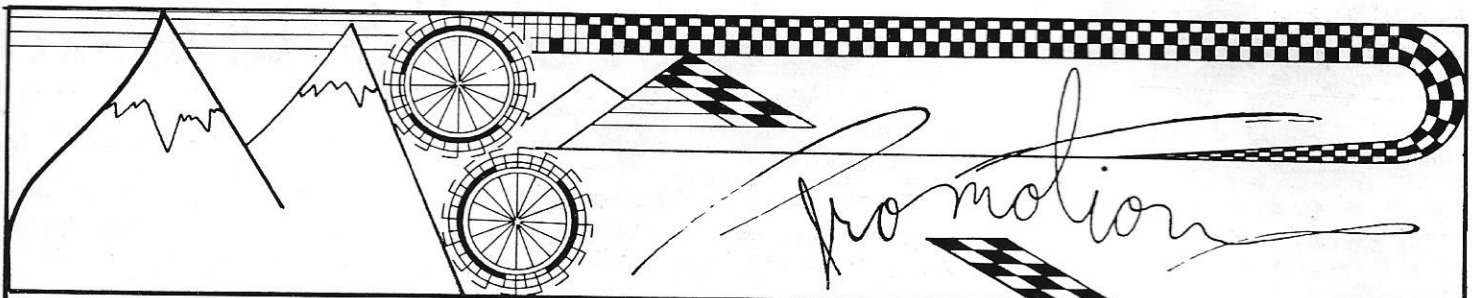
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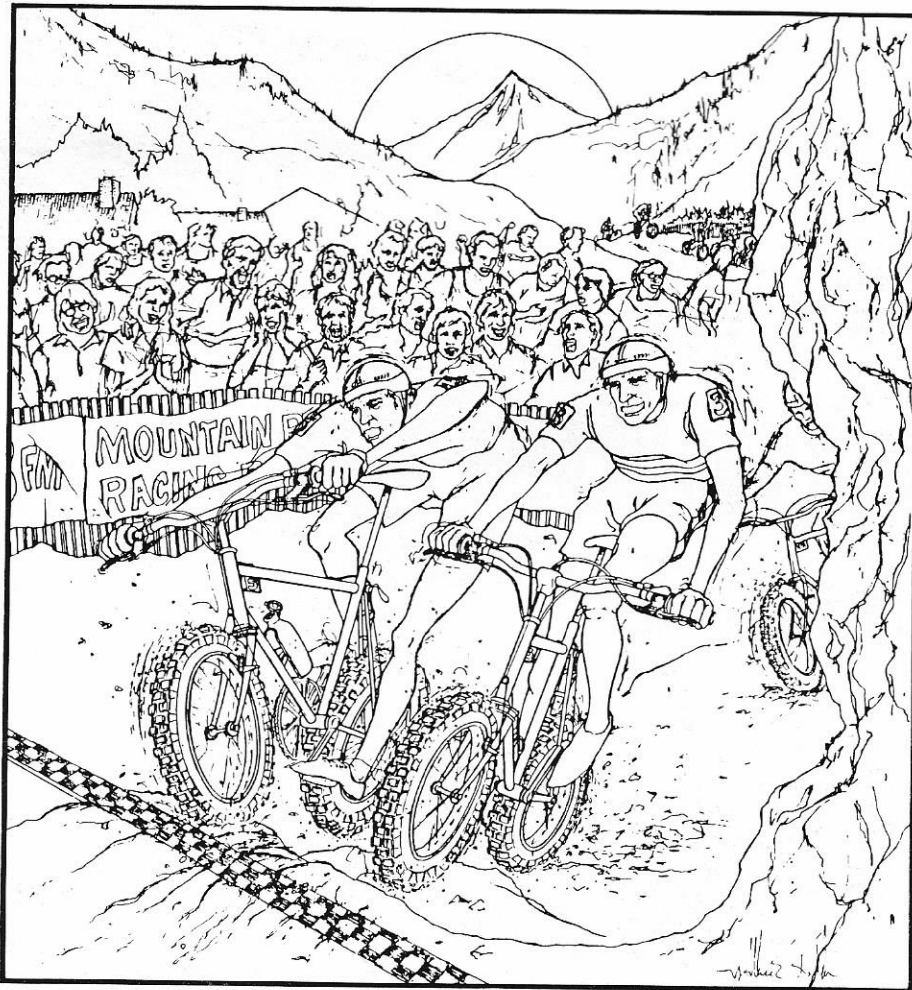
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1983 San Juan Cup Stage Race



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**Sun, Oct. 16th
15 Mile Moun-
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Winners will be established by lowest overall time for both days. Racers may not participate in Sunday's criterium if they do not finish on Saturday. Prizes will be awarded following the Sunday criterium.

COMPETITION RULES:

Headgear mandatory. Two (2) 8 oz. water bottles mandatory on Saturday. All spare parts and tools must be carried by the racer; all repairs must be made by the racer or a fellow racer.

INSTRUCTIONS:

Sign-in at El Cariso Picnic area on Saturday, 7:30-8:30 AM. Race start 9:00 AM Sharp! \$15.00 pre-race entry deadline October 10th. Entry fee after Oct. 10th, \$18.00. Send check or money order with your name, address and race category to: Mountain Bicycle Racing Promotions, 3020 Newport Blvd., Newport Beach, CA 92663.

CATEGORIES:

Expert/Pro; Novice; Women.

DIRECTIONS:

Between Los Angeles and San Diego. Take Ortega Hwy (74) offramp Northeast, off of Interstate 5 Fwy. Offramp out of San Juan Capistrano area.

CAMPING:

Three campgrounds within 5 minutes of race start on Ortega Hwy. First come, first serve basis. \$5.00 per campsite.

BRAKES

PRODUCT REVIEW CANTILEVER BRAKES DIA COMPE • SHIMANO MAFAC/TOMMASELLI

by Glenn Odell

As promised last issue we will evaluate cantilever brake systems of the SUNTOUR and SHIMANO gruppos along with the MAFAC/TOMMASELLI system used on the Stumpjumper.

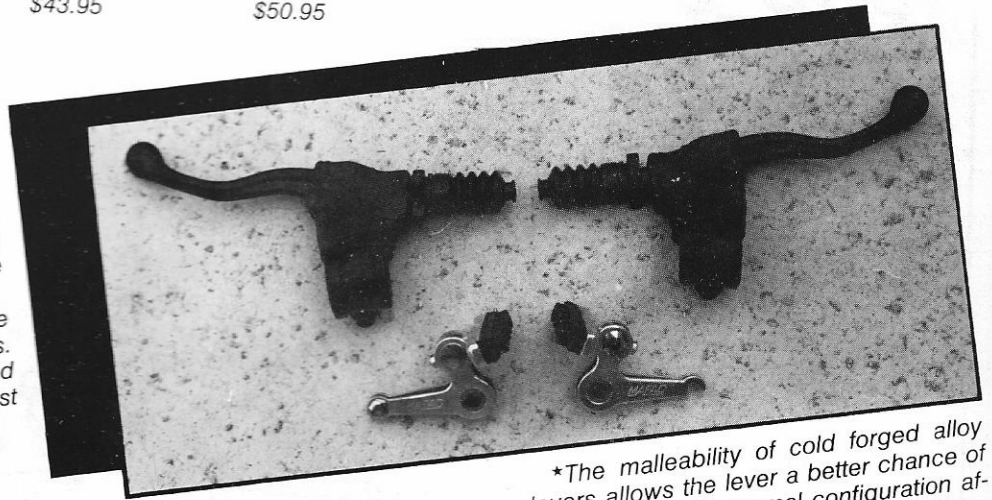
The MAFAC/TOMMASELLI system was included in our evaluation as a reference to compare the new designs with a traditional system.

First, the vital statistics:

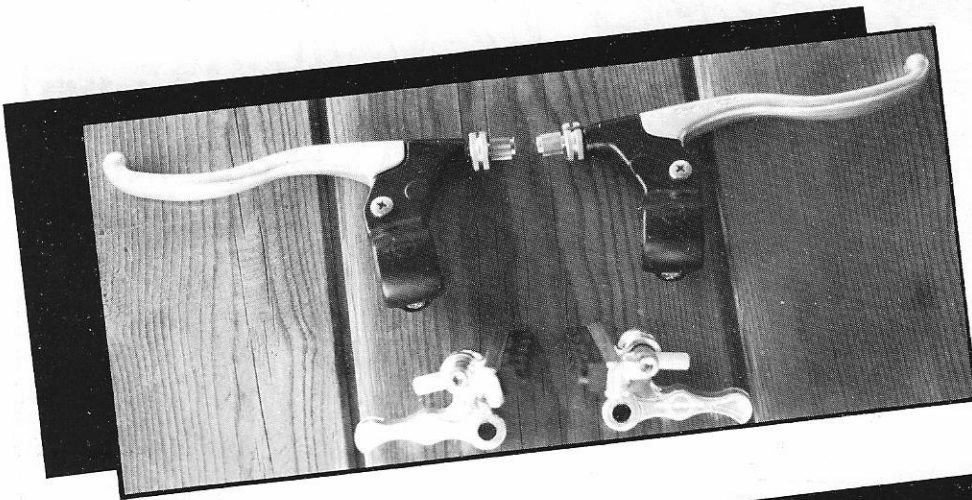
	DIA COMPE	SHIMANO	MAFAC/TOMMASELLI
ARMS & PADS	10.2 oz (290g)	9.4 oz (266g)	8.0 oz (226g)
LEVERS	9.6 oz (272g)	11.6 oz (329g)	13.9 oz (394g)
TOTAL WEIGHT	19.8 oz (562g)	21.0 oz (595g)	21.9 oz (620g)
APPROX. PRICE	\$36.95	\$43.95	\$50.95

The TOMMASELLI levers have a reputation for durability from their successful use on mass production Fat Tire Bikes. The cold forged* black alloy levers on the black alloy clamp have rubber lever hoods and adjusting barrel boots that look nice and keep the moving parts clean.

The MAFAC long arm cantilever is the standard for tandems and mountain bikes. It is the lightest in the group and coupled with the TOMMASELLI levers it is a first class system.

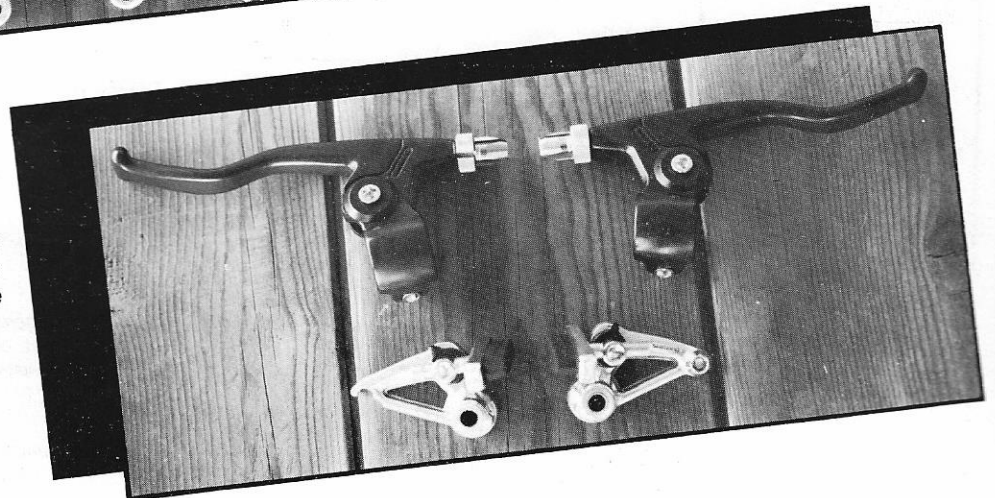


*The malleability of cold forged alloy levers allows the lever a better chance of being bent to its normal configuration after distortion from impact without breaking.



The DIA COMPE system offers the lightest levers. The cold forged silver alloy lever on a black alloy clamp has a mild bend to allow a comfortable grip while providing for maximum cable travel. The cantilever arm has been redesigned to provide long arm leverage.

The SHIMANO system also offers cold forged black alloy levers on black alloy clamps with 6mm fasteners at the pivot and on the clamp. The cantilever arms are the nicest we've seen to date. The pivot points are sealed and free play and toe adjustments are secured with a single 6mm allen fixing bolt.



FIELD TEST:

The test format was established by Tuesdail Laboratories in Los Angeles. We measured a 100' downhill run on a steep (15%) street and placed a grid of masking tape on the initial stopping zone. Each run was conducted as follows: an experienced rider started a gravity coast from a standstill and as the handlebars passed the 100' mark (at 16 mph) the observer gave a stop cue. Measurements were recorded from where the masking tape was torn by the skidding rear wheel to the front axle at the final resting point.

The tires on all three bikes were new, all identical and mounted on the same type of wheels. Pressure was 40 psi.
Test No. 1: rear only (because it was fun).
Test No. 2: front & rear "panic" application.

For the rear test each bike's stopping distance was recorded and verified with a second run.

Test No. 1 results were:

- MAFAC/TOMMASELLI** 61'5"
- SHIMANO DEORE XT** 67'1"
- DIA COMPE System 2** 68'6"

The front/rear test was conducted three times and the results were averaged.

Test No. 2 results were:

- MAFAC/TOMMASELLI** 26'1"
- SHIMANO DEORE XT** 26'5"
- DIA COMPE System 2** 26'6"

The results indicate, as in last issue's power train comparison, that the two Japanese component giants are producing products of similar quality and capability. Therefore cost and weight may be a factor in your choice.

These systems were tested as provided to the consumer, with as many variables as possible eliminated in the field, but there was a significant difference in one system. The MAFAC/TOMMASELLI and the DIA COMPE system come with motorcycle quality cable and housings. These two systems were very responsive.

The SHIMANO system comes with mediocre quality bicycle cables and housing and had the most give, allowing the levers to contact the grips. It is possible that significantly better results could be obtained from the new design of SHIMANO by utilizing motorcycle cables and housings.


By the way, if you have a component you would like to see us evaluate, drop us a line. Keep on Flyin'.

G.O.



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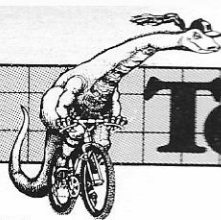
cold-forged alloy for strength, and longer for more leverage and greater stopping power.

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Tech Tips by See Kay

ADVANCED TECHNIQUE

One of the more interesting and advanced maneuvers possible on a bike is the "bunny-hop," which was originally perfected by the BMXers to the point where some riders can clear a sawhorse with a jump off flat ground. This is generally done without toeclips, which leads to speculation on the part of observers on how the back end of the bike is lifted.

As performed by Fat-Tirites the bunny-hop is not as spectacular as the BMX variety, since the bigger bikes are heavier and have less room to "suck up" the machine. However it can be a useful skill for riders confronted with an unseen ditch or a log to be cleared at speed.

For my money it is harder to bunny-hop with toe clips than without, since the essence of the move is a weight shift rather than pulling up on the pedals. The components of the bunny-hop are: pulling up on the bars, unweighting the body, and rotating the bike around its center of gravity. While this sounds like three separate actions, they are blended into one, and the bike lifts smoothly off both wheels.

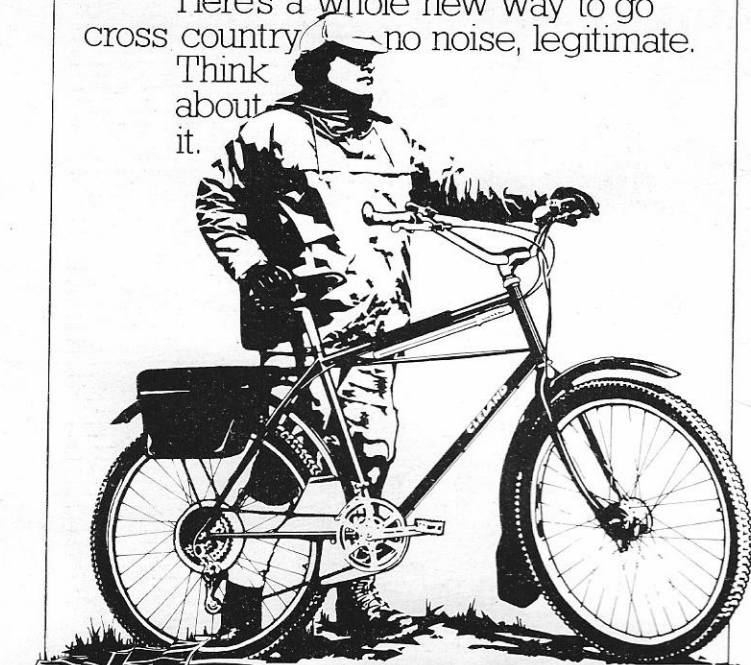
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Broken down, it goes like this: set up for the jump by getting out of the saddle and bending your knees. Spring upward (unweight) while pulling up the front wheel into a "wheelie." As soon as the front wheel starts to lift, push forward on the bars, which pulls the rear wheel off the ground. With a little practice you will find that you can pull the bike up even further by bending the knees after becoming airborne.

PEDALS: TOE CLIP, OR NOT TOE CLIP

One of the raging controversies going on in the Fat Tire world is the use, or non-use of toe clips and straps. After a recent race we heard two competitors discourse thusly:

"Gosh all heck! I'm never going to use toe clips again. I couldn't get going in the woods."

"Why don't we trade, 'cause I had bear traps and I couldn't get going on the hills."

The concensus on clips is that there is no concensus, and there are successful riders on both sides of the controversy. We have noticed, however, that a number of top competitors are using clips and straps, figuring that the time gained on climbs is more important than any lost on remounts or on downhills where a clipped-in rider might be a little more cautious.

Actually, clips and straps on a rough descent can be an advantage, since the rider doesn't have to worry about slipping off the pedals, and a really skilled rider can get crossed up and sideways without putting a foot down. The secret here is to keep the inside pedal down and slightly to the rear, rather than the outside pedal. While this flies in the face of instinct, it is effective because it shifts the rider's weight to the inside of the bike, something like those motorcycle racers who literally hang off the inside on turns. If the bike frame is on the outside of the turn relative to the rider's center of gravity, a "high-side" crash is nearly impossible.

"Bear-trap" pedals are very comfortable as long as the rider contacts them only with his feet. One rider says that there are two reasons why you don't slip off them, "First, because they have such good grip, and second, because the consequences are way too awesome." This same rider files the teeth on his pedals to a sharp point before races, and to date he hasn't finished any events with "bear tracks" on his shins. He says his worst pedal injury happened in the shop when a wrench slipped.

BRAKE LEVERS--LEFT OR RIGHT

We would like to add fuel to the continuing controversy of which side the brake levers belong on. Does the front brake go with the right lever and the rear brake with the left? Or vice versa? (There are only two possibilities.)

The envelope, please... the answer you've all been waiting for... It doesn't matter! It seems that it is strictly personal taste. For a reference we will cite a poster showing the finish of the World Championship pro road race circa 1975. Of the five riders pictured, three have it one way and two the other.

I prefer the front brake on the right, for no good reason except that the first nice road bike I purchased was set up that way and I've set my bikes up like that ever since. Most ten-speeds come from the shop set up the opposite, and Americans are used to that standard for bicycles. But motorcycles come set up like my bike, with the front brake on the right. So when cyclists check out my ride, many of them say, "How come your brakes are set up backwards?" And when motorcyclists look at it they



David Favollo

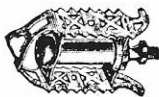
say, "Hey, your brakes are set up right for a change."

A common practice on the part of people setting up their bikes is to adjust the brake levers so tightly that the brakes come on with the first touch of the lever. I adjust mine so the levers travel about halfway before the brakes come on, and the rear will just lock up if I pin it to the handlebar. The reason for this is that when you reach for the brakes on a really rough descent, you can't close your hand very much with the brakes tight, and it can be hard to hang on. When the lever is close to the handlebar you have a solid grip that isn't likely to be shaken loose.

On those paint-shaker rocky downhills I ride with just the rear brake engaged, and I don't touch the front unless I need to slow down a lot. The drag created on the rear wheel checks my speed and keeps me under control, and by not holding the right brake lever at all I have at least one hand that is firmly attached to the handlebar. Also, if I hit a hole or a rock that jars my front brake hand, if it isn't on the lever I won't tighten my grip instinctively and flip over the bars. This is important because it hurts to flip over the bars.

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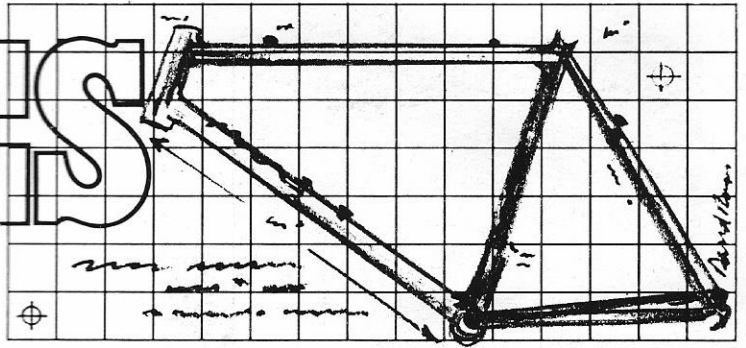
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FRAMES

why custom?



Looking over off-road bikes in a bike shop, customers are often struck by the similar appearance of the custom bikes vs. mass-produced models. The equipment is roughly the same, but custom bikes are sometimes twice as expensive as the others. "Why so much?" they ask, "They look almost identical."

There are major differences in strength and performance between custom and factory bikes. If the rider plans to use his or her bike for casual riding or non-stressful off-roading, then obviously a mass-produced bike makes a lot of sense. But for competitors or long-distance tourists the extra money for a hand-built frame is probably well spent.

For one thing, custom builders use chrome-moly tubing nearly exclusively, while many less expensive bikes feature cheaper tubing either entirely or in part. They look the same, but cro-mo is much

tougher than mild steel or "high tension" steel. In addition to durability, cro-mo is stiffer, giving the bike a snappier feel.

Design has a lot to do with stiffness. Some of the cheaper bikes have chainstays that are sharply bent just behind the bottom bracket so they will clear the rear tire. This bend reduces stiffness considerably, and probably means that the tubing isn't chrome-moly, which objects to this kind of treatment. Expensive and/or well designed bikes have this bend reduced to the minimum, partly because it is stiffer, and partly because framebuilders don't want to risk crimping the tubing.

Here is an example of the importance of frame stiffness: a potential customer test rode a popular import, then returned to the shop to ride a domestic custom bike. "Wow," he said after returning from the second ride, "The custom bike must be a lot lighter." But after putting both bikes

on the scale, he found that the custom bike was actually heavier. The difference? The custom bike was much stiffer, and the rider's energy went directly to the rear wheel, while on the import part of his energy was being absorbed by the frame as the bottom bracket flexed from side to side.

One way to check for frame stiffness is to put the bike in the highest gear, then accelerate as quickly as possible. Watch the chainring to see if it is moving from one side of the derailleur cage to the other. All bikes will do this to some extent, but if it hits both sides you probably want a stiffer frame.

Tubing being equal, durability depends on how well it is joined together. According to tests performed by the Santana tandem company, the lugless brazed joint is the strongest way to join chrome-moly tubing. This is a hand process that must be done by an expert, however, and is not usually done in factories. Currently most imports come with stamped lugs, which, while not as strong as the cast lugs used on expensive racing bikes, are strong enough for most riders. Stamped lugs are characterized by a thick edge, as the steel is the same thickness throughout, as well as a seam. Cast lugs have the tapered edge that makes fine road bikes look so nice.

The major problem with lugs is that they can hide inconsistencies. If the brass or silver solder doesn't penetrate thoroughly, the rider might not find out until it separates. Also, if the torch is held on the lug too long it can overheat the metal and weaken it. Conversely, it is almost impossible to overheat a brazed joint, because above working temperatures the brass becomes too runny.

No matter how well built it is, every frame has its limits, and a frontal impact will put extreme stresses on the top and down tubes just behind the head tube. A wise builder will carefully gauge the strength of the fork; it must be strong enough to hold up to off-road abuse, but in the event of an impact, it should bend before the frame does, since forks are cheaper and easier to replace than frames.

For a forthcoming issue we plan to ask a number of bicycle manufacturers the hard question. "What do you do for a customer whose frame breaks, and what are your guarantees?"



MARIN'S MOUNTAIN BIKE HEADQUARTERS

Village Peddler

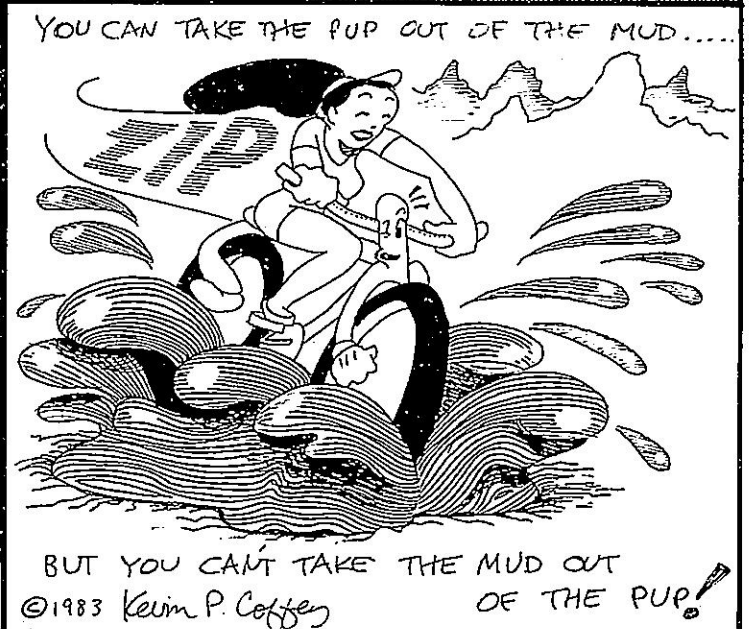
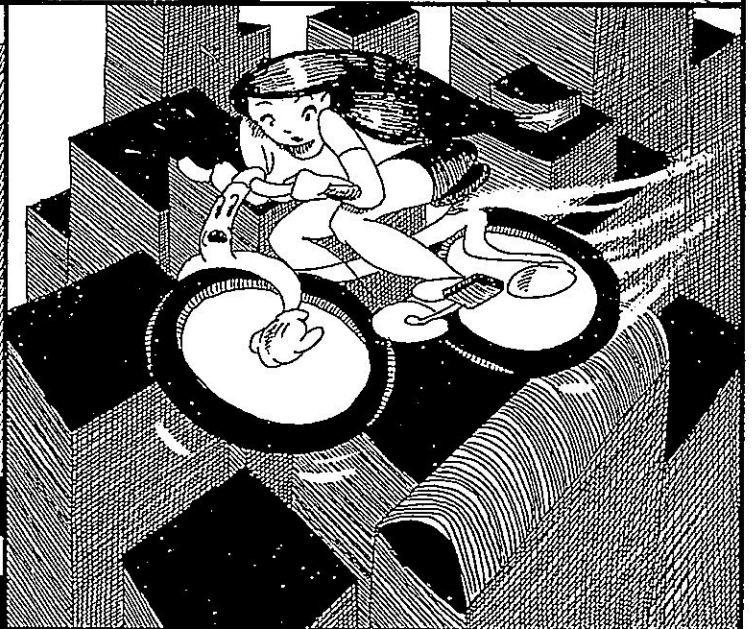
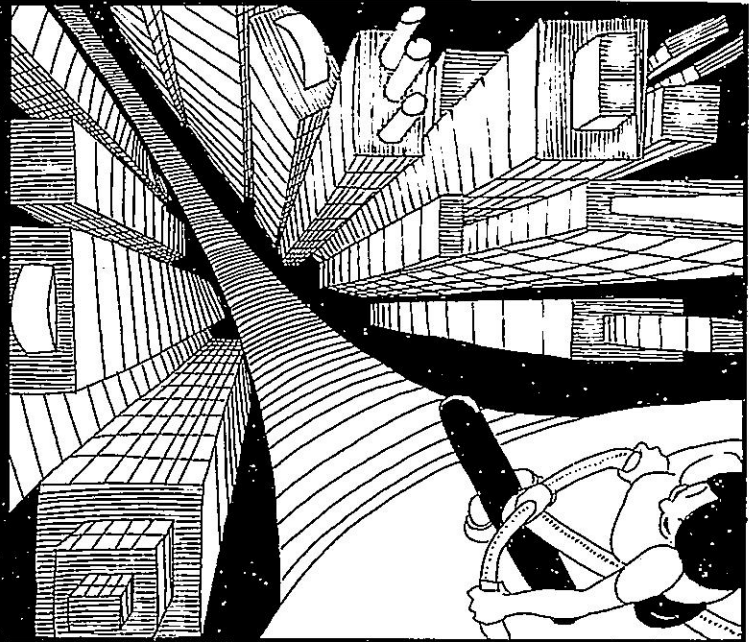
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Race Reports

SHIMANO CARLSBAD GRAND PRIX Carlsbad, California

Probably the shortest mass-start off-road bicycle race yet held, the Shimano Grand Prix was staged between heats of the Nissan Motocross Grand Prix on June 26th in Carlsbad, California. The total distance was about three miles, two laps of the motorcycle circuit, but they were some of the toughest miles ever put in front of bicyclists.

The 39 riders were selected from the cream of California off-riders, including top placers in most of this year's races. Clark Roberts of the Ross team picked up his first win for his sponsor along with a nice piece of change for his efforts, something in the neighborhood of \$600, partly prize money and part sponsorship.

Joe Murray, riding for MountainBikes, led for most of the race, but suffered some bum luck as he dropped his chain near the finish to let Roberts by for the big win.

The course is designed for motorcycles, which have, uh, motors that will get them up muddy 60% slopes as well as through mud a couple of feet deep. The cyclists found that they had to carry their bikes up

the hills, which slowed things up a bit. On the descents they had to contend with extremely steep slopes and deep mud. The biggest crowd reaction came when one rider performed a "mud-hole face-plant" in the deepest such hazard.

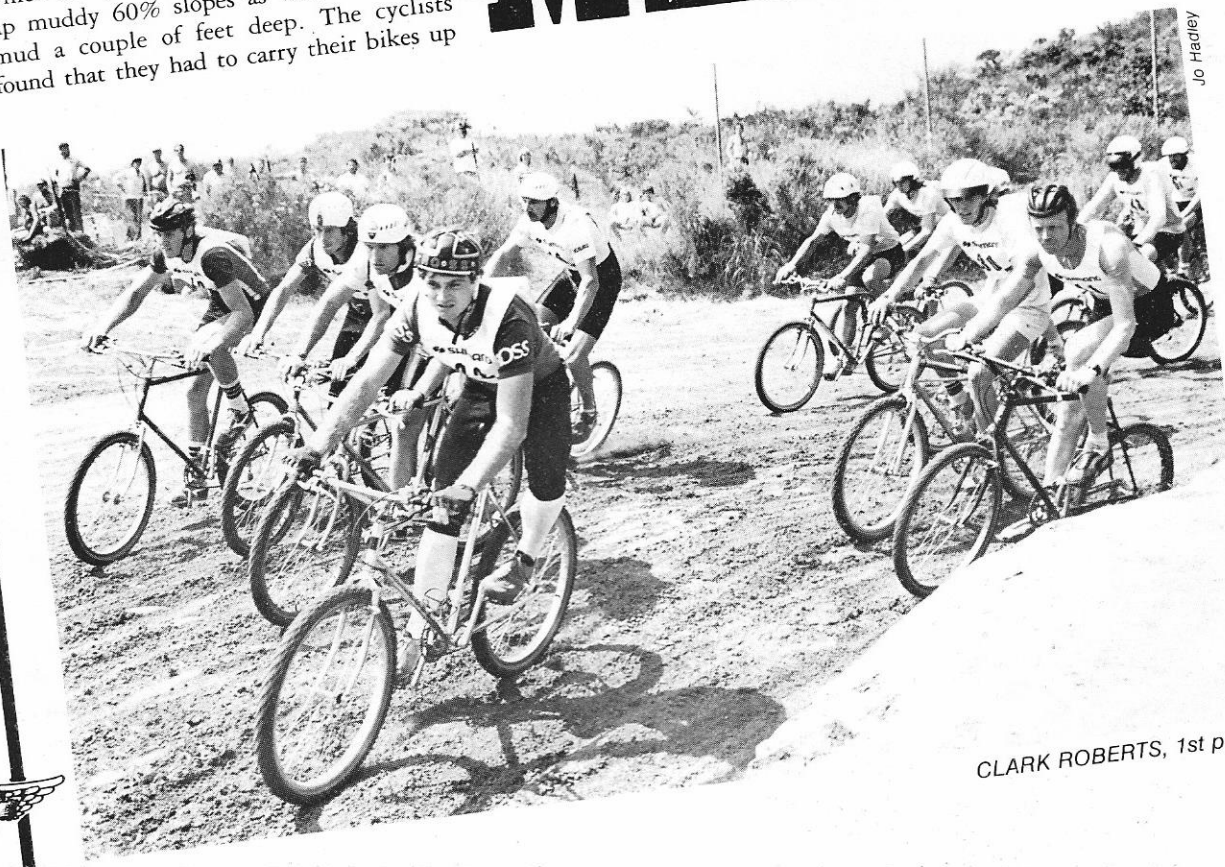
One cyclist commented that it wasn't his idea of an off-road race and that he would have been better off on his old one-speed. That may be true, but where else do you find 30,000 people to watch an off-road race?

RACE RESULTS

1. Clark Roberts, San Marino, ROSS
2. Jim Jentes, San Jose, RITCHEY
3. Jim Sloup, Sherman Oaks, DIAMOND BACK
4. Todd DeAngules, Los Angeles, MANTIS
5. Greg Edwards, Sacramento, SR
6. Steve McIntosh, Culver City, ROSS
7. John McCormick, Los Angeles, ROSS
8. Joe Murray, San Anselmo, RITCHEY
9. John Stallone, EL Cerrito, RITCHEY
10. John Howard, Leucadia, MOUNTAIN GOAT



SHIMANO MOUNTAIN BICYCLE Grand Prix



Jo Hailey

CLARK ROBERTS, 1st place



BACK ISSUES

We couldn't possibly take the time to individually answer everyone who has asked about back issues, so we'll do it here. Some issues are out of print and out of stock, never to be seen again except by the fortunate few who subscribed early. We do have available copies of some of our back issues. You will be relieved to know that the price indicated includes postage, which costs us more than the bulk rate we use for your subscription copy. Outside the U.S., add \$1.50 (U.S.) for each copy.

Since we know you would never cut your **FAT TIRE FLYER**, especially if this ad interests you, duplicate this page to order the back numbers.

March-April 1982 \$2.50
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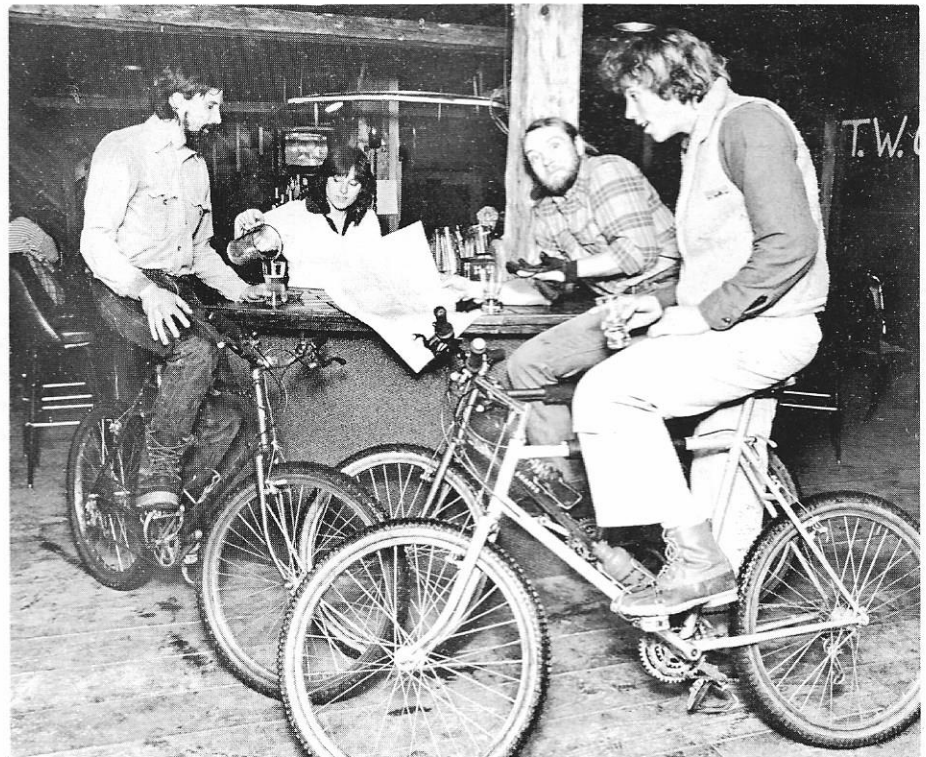
FAT FEEDBACK *Continued from page 5*

tires. Don't misunderstand me, I still enjoy my ten speed bikes, BUT... I found a Schwinn three-speed in the junk one day; someone was throwing it away. The poor thing needed some work and a little tender loving care. So my free bike has now cost me \$150.00. New alloy 26 x 1.75 rims, Jim Blackburn front, rear and two water bottle carriers, alloy crank, handlebars, stem, seatpost and the list goes on.

I love riding this bike... Because of the new fork I have a 43 1/2" wheelbase and I don't go as fast or as far, but I seem to see and feel the country a lot better. I'm changing over to a 15 speed setup with derailleurs and Campagnolo hubs with four cross.

Has anyone done or written about any long touring on Fat Tire Bikes? How did they do? Where did they go? I don't know but when I ride my Fat Tire bike I seem to soar to the sky; it's me and I love it.

Lewis J. Anderson (Jack)
Troy, MI



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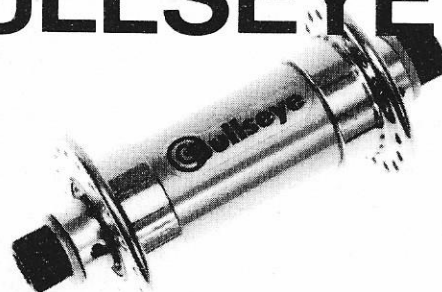


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Fat Tires

REGIONAL POLITICS

Kevin Montgomery of the Skid-Lid helmet company has forwarded us an article from the Southern California Sierra Club newsletter, the HI SIERRAN, concerning off-road bikes and how Sierra Clubbers relate to them. The writer, Dan Eaton, was an admitted skeptic until some of the SoCal gang took him for a ride. Obviously convinced of the legitimacy of Fat Tires, Dan in his article systematically refuted all the gripes non-cyclists would like to have against them. His conclusions were that Fat Tires do no more damage than

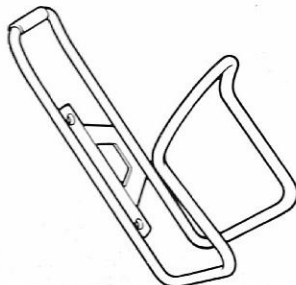
vibram soles and far less than horseshoes. (July-August HI SIERRAN.)

Kevin has also alerted us to the danger of trails in Cuyamaca Park being closed to cyclists, due to their damage to the horse(!) trails. We urge all Southwestern off-roaders to write to:

Mr. H. Heinze, Regional Director
California State Parks
and Recreation Department
Southern Regional Headquarters
2505 Congress Street
San Diego, CA 92110

ABJECT APOLOGIES!

A couple of issues back we ran a product review of the BLACKBURN BX-1 bottle cage. Trouble is, we used a picture of model BC-1. In our relentless pursuit of truth and advertisers we would like to correct that error by printing a picture of the real thing.



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We suggest that in your letter you bring up these points:

1. Any responsible organization you might belong to, such as Sierra Club, N.O.R.B.A., or bicycle club.
2. You are a bicyclist, not a motorcyclist.
3. Bicycles impact the environment comparably to bikers and far less than horses or motorcycles.
4. Responsible use of trails by cyclists does not endanger or inconvenience other users.

Ask that:

1. Restrictions on the use of trails by cyclists be avoided until adequate studies are made and public hearings are held.
2. Any information or data available on the subject of trail cycling be provided to you, including information on environmental impact, trail degradation, injuries or complaints from other users.
3. You be informed in advance of any upcoming hearings or meetings concerning off-road cycling that are open to the public.

NEW CLUBS

One last message from Mr. Montgomery. Any SoCal cyclists interested in a club should contact San Diego Mountain Cyclists at 1560 California Street, San Diego, CA 92101.

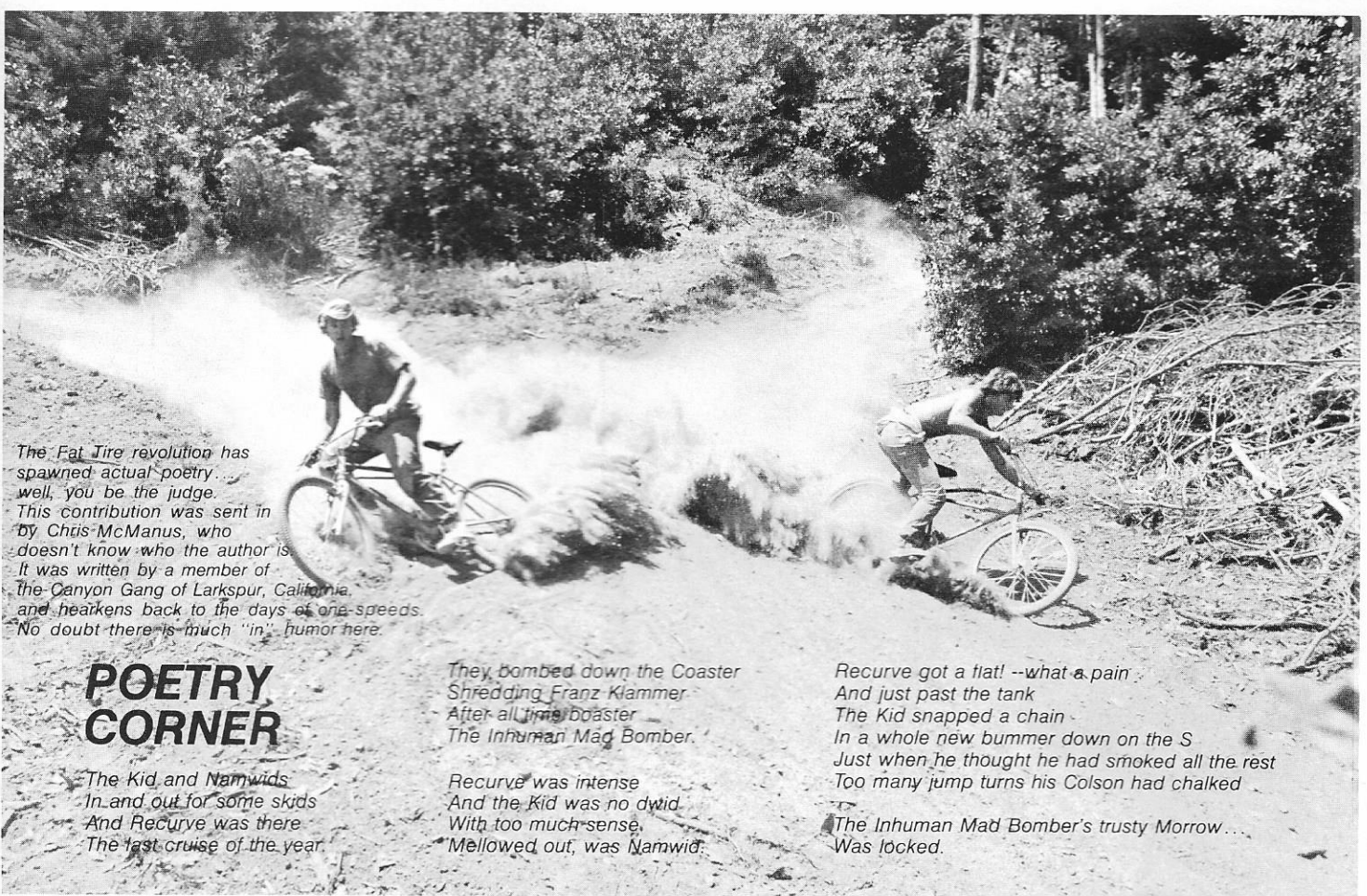
Speaking of clubs, NorCal has a new one based in Silicon Valley. Anyone interested there is urged to send a SASE to Silicon Cyclers, c/o Brightside Cycle Shop, 1435 The Alameda, San Jose, CA 95126. According to spokesperson Akos Szoboszlai, Grant Ranch County Park has 50 miles of trails and dirt roads and no restrictions on bicycles. Other parks in the area include Big Basin, New Almaden Park, Sunol, and Henry Coe.

CYCLING SOCIAL EVENT

Every year around Bastille Day the cyclists of SanFRANCEisco hold a gigantic cycling rally called the Tour de SanFRANCEisco, which attracts a thousand-plus riders, mostly of the skinny-tire persuasion, for a 30-mile ride through The City. This year's version saw a few Fat-Tirites blasting the majority of the field in a convincing demonstration of industrial touring.

Jacque Phelan, riding a custom Cunningham aluminum balloon, was the first woman to finish the tour (it's not a race), ahead of all but 49 of the men. Just to demonstrate that she had taken no special pains, she rode dirt tires, although she claims there were filled with a high-octane mixture of hydrogen, helium and hot air.

Ms. Phelan, a.k.a. Alice B. Toeclips, has suggested that those who travel from far afield for the annual Thanksgiving Appetite Seminar get together afterwards for a pot-luck dinner. If interested contact her before November 17 at 415-457-1779.



The Fat Tire revolution has spawned actual poetry... well, you be the judge. This contribution was sent in by Chris McManus, who doesn't know who the author is. It was written by a member of The Canyon Gang of Larkspur, California, and hearkens back to the days of one-speeds. No doubt there is much "in" humor here.

POETRY CORNER

The Kid and Namwid
In and out for some skids
And Recurve was there
The last cruise of the year.

They bombed down the Coaster
Shredding Franz Klammer
After all this boaster
The Inhuman Mad Bomber.

Recurve was intense
And the Kid was no dwid
With too much sense,
Mellowed out, was Namwid.

Recurve got a flat! --what a pain
And just past the tank
The Kid snapped a chain
In a whole new bumper down on the S
Just when he thought he had smoked all the rest
Too many jump turns his Colson had chalked
The Inhuman Mad Bomber's trusty Morrow...
Was locked.

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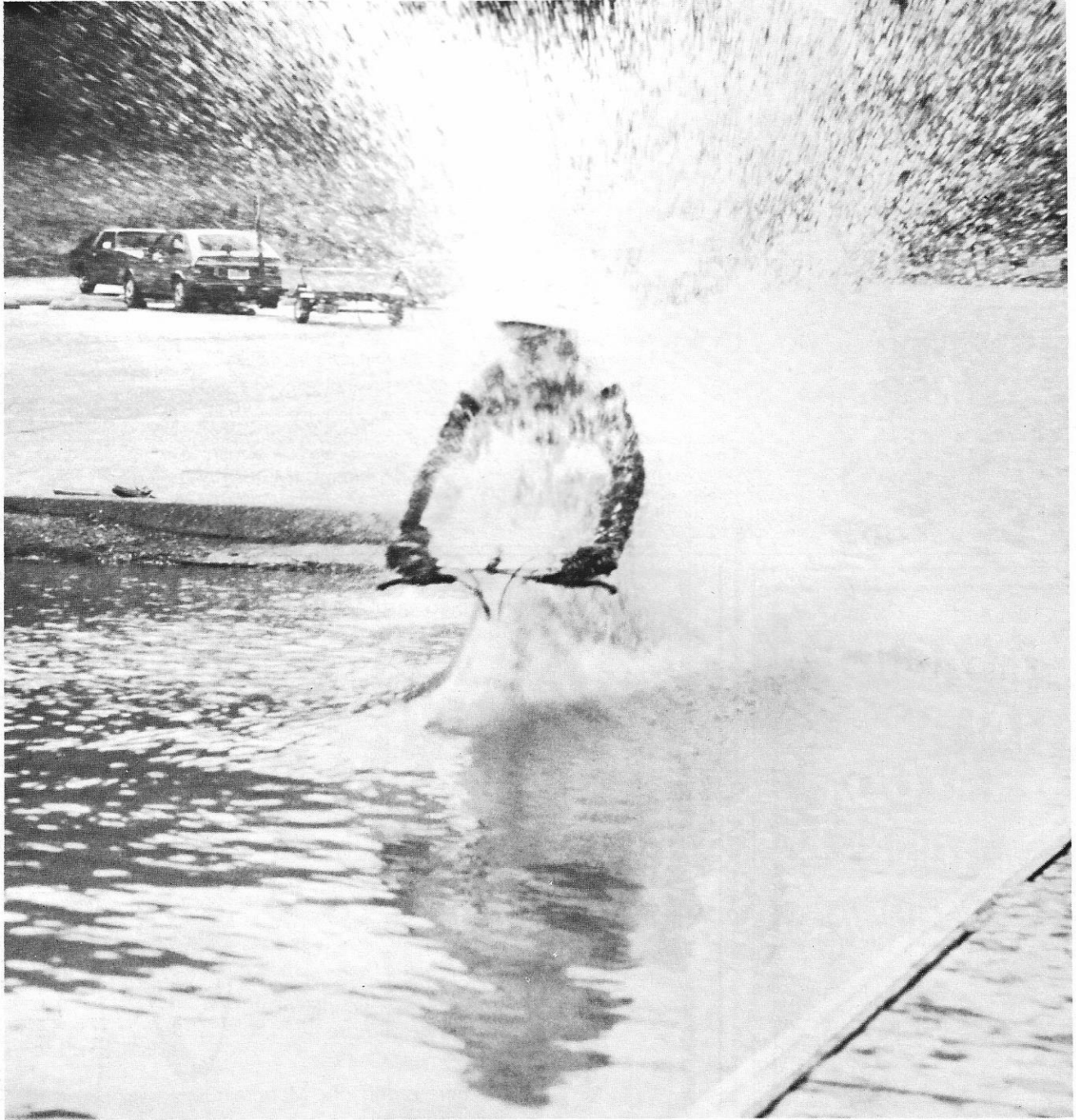
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\$2.00**

M O U N T A I N B I K E S

1501 SAN ANSELMO AVE., SAN ANSELMO, CA 94960 • (415) 459-2247



“Just when you thought it was safe to go back in the water...”

The SUNTOUR SOLUTION

The Problem:

How to get smooth, dependable fat tire bike performance under the most atrocious weather, load and terrain conditions.

The SunTour Solution:

SunTour Tech Components. Two front derailleurs, the MounTech and AG Tech, with a capacity for a 26 tooth difference between the largest and smallest chainring. Three rear derailleurs, the sealed-mechanism Superbe Tech, the light alloy MounTech and the rugged AG Tech, with a patented twin-pivot cage design which guarantees precise clearance between guide pulley and sprocket. Modestly priced sealed bearing hubs. Sealed bottom brackets. New Winner freewheels, Dacrotized to make them impervious to rust and corrosion. Patented Power Ratched thumbshifters for precise control under any conditions. Wide-base, symmetrical XC-II pedals for use

with ordinary shoes or boots. A quick-release seat post binder bolt that works well time after time.

SunTour components. From the beginning, the preferred choice of fat tire bikers. For more information, talk to your favorite professional bike shop.

The SunTour Philosophy:

- The bicycle is a tool...a means to an end. Its fundamental purpose is to stretch how far, how fast, and how comfortably you can travel under your own power.
- The bike and its rider are an ergonomic system whose mechanical components

must work in complete harmony with the human component's needs and behavior.

- Each SunTour component is designed to be fully compatible with other SunTour components. This Modular Component Concept lets you select the exact features which you need in a derailleur, lever, freewheel, etc., with the assurance that the components will work in complete harmony.



SUNTOUR
SunTour USA, Inc.

We make bicycle parts as though we're coming along for the ride.

Fat Tire Flyer™

BOX 757 FAIRFAX, CA. 94930

*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.*



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Cross-country Race, October 1977

