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BRUCE GORDON ROCK 'N ROAD

Champion of the White Trail.

By Ted Costantino

Just because Bruce Gordon is one of America's most respected frame-builders doesn't mean that this story starts with his metalworking skills. Not at all. And the whole hybrid angle? For Gordon, that came later. Nope, Gordon's story starts with a tire.

This is no ordinary rim protector, you understand. This is the Rambo of off-road rubber, a 700C manure from Finland sporting sidewalls as tall and rubber as thick as anything you'll find this side of a Caterpillar front-end loader. It's the Speed Hakkapeliitta, though where the speed comes in we don't know, because a pair of these things will bog your bike down as surely as cement overshoes in Sheephead Bay. In fact, just one Hak shivered the timbers of the BG Weight-O-Meter as no tire had before, pushing the big dial only an ounce shy of two full pounds.

Getting that much rubber rolling down the road is no mean feat; pushing it over hill and dale would seem impossible. Ah, but that's where smug conceit must yield to wondrous discovery: In every way but avoidpous, the Hakkapeliitta is a great off-road tire. Its wacky asymmetrical lug design digs into hard-packed trails and loose scabble alike with relish. Its sheer girth keeps it from bogging down in viscous mud, and its Arctic Circle origins become impressively clear in snow and slush. And if you need more, the Hak delivers—it's drilled for ice studs, and can take on enough metal barbs to turn itself into a rolling porcupine.

Rubber so wonderful deserves a frame designed to match, and that's where Gordon comes in—or would have, if his pal Gary Helfrich hadn't gotten there first. "There," in this case, means California's Cupertino Bike Shop, where Helfrich was browsing for some special rubber. What he found was the Haks in their full shell-crushing glory. He toted some off to Gordon's new shop in Petaluma, and sat down with Bruce to consider the consequences.

"I figured we'd throw together what I

call a fast town bike," says Helfrich. "You know, pretty upright angles, fairly short wheelbase, and then try to stuff these giant tires into it. I needed a bike to commute to work." It all sounds unlikely to the untutored ear, but Gary has made a career from ignoring the orthodox. His accomplishments include the invention of the Merlin titanium bike, yet his recent move to the West Coast as an itinerant metalworker, inventor, and general gadfly had left him, inexplicably, short of wheels.

But the town bike soon evolved beyond its intentions—I mean, look at those tires; do they say "town" to you?—and Gordon, with Helfrich's encouragement, made a mountain bike from the concept. Well, sort of a mountain bike, except with 700C wheels, drop bars, and long chainstays, which were a consequence of Bruce's touring-bike preferences and the need to make room for the mammoth rubber.

Gordon's transmogrified tourer worked okay on the road, but for off-road work, those long chainstays had to go. "That was the hardest thing to figure out," Helfrich recalls, "the rear triangle from hell. We ended up building three or four prototypes, and agonized over crimping and bending and flaring and all kinds of things before we got it exactly right."

"Exactly right" is precisely how the Rock 'n Road feels. In its final incarnation, with the bulging Haks crammed into the dropouts, this bike rolls over anything, and does so with an agility that belies the tires' weight. Bruce's bike defines the term "hybrid"; its road-style geometry moves it over pavement better than other bikes of its type, yet the fat rubber, short chainstays, and good weight balance make it indomitable in the dirt.

Indomitable? A hybrid? Yes, and here's how good it is: The toughest trail we face in suburban Boston's Middlesex Fells is an undulating slash of eroded boulders, slippery scree, roots and loose rocks. It's called the White Trail for the painted

marks on the trees, and it's one that neither Keith nor I could conquer until the Rock 'n Road came along. But with the Hakkapeliittas churning below and our hands resting lightly on the Rock's flat bars, we cleared the White Trail with nary a dab.

Those flat bars are the next-to-last touch of perfection in Gordon's design. They arose out of an argument between Bruce and Gary about drop bars on mountain bikes. "I said, 'Here, I'll show you a picture of last year's NORBA Nationals, and you show me all the guys out in front with drop bars,'" Helfrich recalls. But Gordon was adamant: "On the road, they make absolute sense," he says. "It's a pain to ride flat bars any distance."

So they compromised by making two sets of bars. Each comes with its own brake levers, stem, and cables. With slotted brake cable stops on the frame, and a pair of quick-release connectors for the derailleur cables, the bars can be swapped in less time than it takes to read this page. Put on the drop bars and some reasonable 700C road wheels, and you're ready for a long road ride. Slap on the flat bars and the Haks, and—well, you know.

The final touch will come when Gordon's new Rock 'n Road tire arrives, which is modeled after the Big H but will have a Kevlar bead and a skinwall carcass, shaving untold tons. "They're talking about a 350-gram tire," says Helfrich of the rubber supplier, which is, of course, impossible. Applying the Gary Factor (a simple formula for the correction of hyperbole), we figure the new tires will weigh about 450 grams, or one pound—the same as the Specialized Tri-Cross tires we used for comparison in the spec chart. But they will be fat, as fat as the Haks. And they'll have the same wonderful tread pattern that grips so well off road yet barely buzzes at all on pavement.

Then the Rock will have it all—the fat test 700C tires you can buy, interchangeable bars, great geometry, and unparalleled adaptability. As it is, it has set the standard for what a hybrid ought to be. □

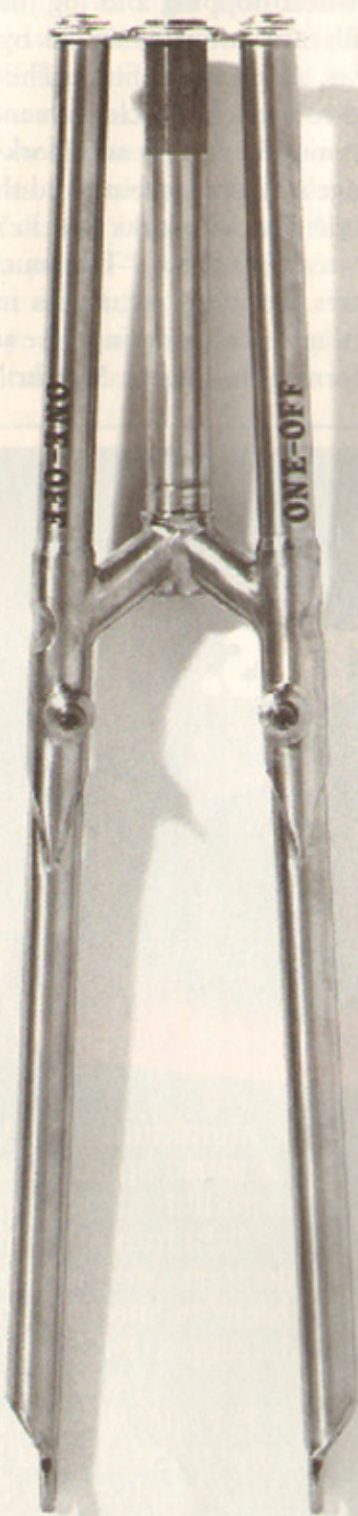


What the h...? Yes, "H," as in Hakkapeliitta, the widest 700C tire this side of, well, anywhere. They're so wide that no ordinary bike can fit them, but the Rock's chainstays (above right) leave plenty of room. If it's pavement you crave, drop the Haks and swap the bars (above left) and the Rock becomes a capable road bike.

Future Forks

Two designers lift a chapter from the motorcycle book of design and create alternatives to the standard bicycle fork.

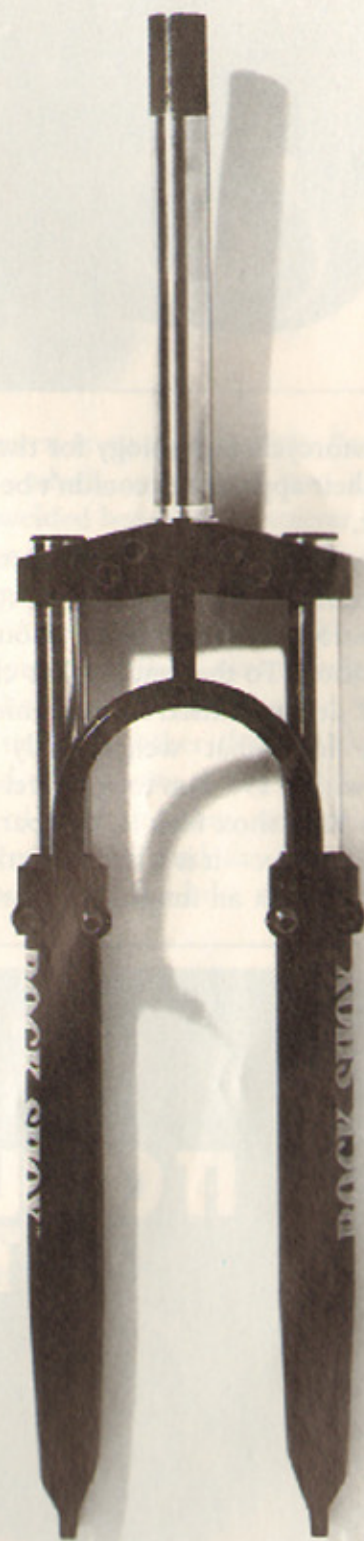
By Doug Roosa



Innovation has been a strong current in mountain bikes ever since that band of West Coast road bike renegades re-worked old Schwinn cruisers into the first fat-tire bombers. The vein of technology is deep in any new sport, of course, but the developmental pace in mountain bikes has been whipped along by an avid group of experimenters who have willfully bent or broken many of the rules on bicycle design. In fact, a case can be made that this work has prodded the entire industry out of its technological slumber by showing it how to be more creative with materials and design.

The mountain bike's rapid development has been driven by need, of course; most road bike parts just don't work in the dirt. But while mountain bike manufacturers and component suppliers have created a host of special parts, much of what is commonly used is little more than modified road hardware. The front fork is one example. The ATB fork is a road bike spin-off, made with heavy-gauge steel tubing for added strength and a broad unicrown for extra tire clearance.

Mike Augspurger and Paul Turner think a mountain bike needs more than just a heavy-duty road fork. Both men have accumulated enough off-road experience—Augspurger is a motorcycle and bicycle trials riding wizard; Turner is an ex-motocross racer and suspension tuner cum off-road rider—to see limitations in the typical ATB fork. Accordingly, both men have designed forks to correct deficiencies as they see them. And if their goals and methods overlap—both seek handling improvements and both draw



▲ Paul Turner's Rockshox mixes air and hydraulic damping for shock control.

◀ Mike Augspurger's One-Off uses extended fork legs to distribute stress.