

Dreams of hand-built frames enter every serious cyclist's head. Five years ago such dreams would have precipitated further thoughts: travel to Europe to inspect the gems of the famous or, at the very least, inquiries into the current shipping rates from Milano to Iowa City or Miami or Seattle.

No longer. These days dreams can be fulfilled closer to home: in Astoria, Oregon or Missoula, Montana; in Garland, Texas or Nashville, Tennessee; in Canaan, New Hampshire or Saratoga Springs, New York. Such has been the growth of the custom frame market that I estimate some 100 Americans are at work building quality machines on a more-than-a-few-a-year basis. Following are introductions to 21 of these American artisans. Others have been included in previous issues: 20 in November 1975, more in August 1976.

The building philosophies of the frame builders listed here encompass almost the full spectrum from "I only build what I want, when I want," to "We produce quality, handmade stock frames at a reasonable price," to "Individual design and attention." We have hobbyists, wholesalers and those approaching mass merchandising. Prices range from \$165 for a no-frills, Reynolds 531 frame to \$1,750 for a fully equipped tandem. Most of these builders are self-taught, although a sprinkling visited England for training. And backgrounds are surprisingly similar: school teachers, bike shop mechanics or those in the aircraft/aerospace industry.

This brief introduction leaves many questions unanswered. Before deciding on a particular builder, always ask, 1) What constitutes a frame? Are a fork and headset included? 2) Are complete bikes available? Some of these builders have supplied this information, but many haven't. Some offer special prices on component packages. 3) What finish is used? Some builders offer bare frames only; others include quality enamel paint jobs in their base price.

The prices, materials and specifications noted here were supplied by the builders themselves and, we suspect, are subject to change. Prices listed are average; the range can vary widely as can delivery schedules. Several of these builders offer brochures detailing their work. If you'd like to correspond with any of them, a stamped, self-addressed legal-size envelope will insure a speedier response.

Ernest Atkinson, 216 Exchange Street, Astoria, Oregon 97103. "I build frames for fun. I build them for other people on an 'I'll call you when it's finished' basis. I'd like you to include me in your article because I think that many people are scared away from trying to build their own frames by esoteric vocabulary and pedantic shop talk.

Introducing 21 American Framebuilders

by Gail Heilman



Hugh Enochs: This 18-inch frame, built for a woman who is just five feet tall and has short legs, still uses 27-inch wheels. The frame features lugless construction and a sloping top tube. (C. Russell Wood photo)

"I became interested in frame building because of a strong interest in the technical aspect of the sport, because I could not find frames that were meeting my cycling needs, because they were becoming increasingly expensive, and because other friends of mine were considering frame building. I only build frames that cannot be purchased anywhere else.

"I read everything about frame building I could get my hands on and talked with some frame builders and very experienced bike shop people such as those at Stone's Cyclery in Alameda, California. My technical experience was inadequate at the time that I became interested in frame building, but I learned all the skills I needed before building my first frame."

Mr. Atkinson is 34 years of age, has

a family and is a school teacher by profession. He and his family have been actively involved in cycling since the mid-1950s.

Ten constructed to date: one touring, nine racing; Columbus SL and SP tubing, some Reynolds; #45 silver solder, some brass brazing; Haden, Fischer, Prugnat lugs; 21½- to 24½-inch frame sizes; \$200 to \$350; delivered "when it is finished."

T. Ballard and D. Gould, c/o Custom Cycle, 101 Brooks, Missoula, Montana 59801. Ballard and Gould, both in their early twenties, are natives of Missoula where they started their custom bike shop in the spring of 1974. Although both have had several years of assembly and repair experience, they just started frame building. They finished their jigs last fall after designing and

working on them for most of the previous year.

"We are interested in unusual or bizarre projects—contact us." (See Ideas and Innovations, April '77.)

Seven constructed to date, 50 to 100 per year projected; Reynolds, Ishiwata, Columbus, Vitus tubing; 17- to 32-inch frames; low-temp. silver and nickel/silver solder; internal lugs preferred; \$300 average cost with six to 10 weeks' delivery.

Caylor Frames, Gunnar Caylor, P.O. Box 1793, Modesto, California 95354. Gunnar Caylor has been building frames for five years, the past two full-time. He was manager of a large bike shop for 5½ years previously. Mr. Caylor is unique among the frame builders in the listing in that he only sells wholesale.

Approximately 360 constructed to date: touring, racing and 18 tandems; Columbus and Reynolds 531 double-butted tubing; 17½- to 27½-inch frame sizes; silver brazing; usually Prugnat lugs; three months' delivery.

Custom Cycles by Wm. Sampson, 5052 Corbin Avenue, San Jose, California 95118. "In two and one-half years of building, I have never built two identical frames because I have never met two identical people. My building philosophy is simple: individual design and attention.

"With the advent of more builders we have seen the decrease in true 'custom'-built bicycle frames at a reasonable price. In most cases, the customer must pay a lot extra for that individual attention because the builder may have to sacrifice some of his mass production techniques to accommodate the 'fussy' customer.

"Each of my frames is individually designed for the customer, combining frame characteristics of rigidity and resiliency in the right proportions for the individual rider. The same consideration is given to the customer who buys the minimum \$165 frame as is given someone who plunks down \$300."

William Sampson, age 20, is a licensed racer, native Californian, former professional writer and photographer and founder of the A. S. Bike Shop at San Jose State College. He has built touring and racing frames and has a tandem in progress.

Some 27 constructed to date with a goal of 75 to 100 per year; Reynolds 531 and 531 SL, Columbus SL, SP, PS, PL tubing; 18- to 26-inch frame sizes; silver solder for main joints, end tips, low temp. bronze; Bocama, Cinelli, Prugnat, Gargatte or Haden lugs; \$200 with four to six weeks' delivery.

Hugh S. Enochs, c/o Javelot Company, La Honda, California 94020. "My karma is to work with bicycles. I have played with, raced and built bicycles all

of my life. However, I far prefer doing frame repair to building. I will do any type of frame repair, especially involving tube replacement on bikes with ornately cut lugs. I like taking a frame that seems completely wrecked, replacing damaged parts and straightening others, then painting it like the original so that there is no evidence of it having been damaged. Maybe I should have been a doctor."

Hugh Enochs, now 35, is a self-taught framebuilder, although he has visited many frame builders in Europe. For many years he fabricated ultra-high vacuum systems for the aerospace and semi-conductor industry. Since 1961 he has built frames with the names Paragon and Javelot, and many with no name.

Builds one to six each year; mixes tubing brands to find the right gauges; no limitation on frame size; silver brazing alloy on all lugged joints and bronze for dropouts and lugless construction; Prugnat lugs and Bocama bottom brackets; \$300 with two- to four-month delivery schedule.

Fastab Cycles, Thomas A. Boyden, 2706 S. Glenbrook, Garland, Texas 75041. "We have founded our business on the principle that the serious cyclist should be able to buy a custom product without paying an arm and a leg. We guarantee our products 100% for life and we make every effort to keep our relationships with our customers on a personal basis. We don't and won't use a computer, except to design frames."

Tom Boyden began serious cycling in college (Cal Poly) in 1958 and was president of the San Luis Obispo, California club that promoted the Southern California championships that year. He is currently an active veteran racer, race promoter, USCF-certified coach, manager of Team Richardson and chief of USCF officials in Texas.

Tom started his frame building in 1972 after 18 years in the engineering industry, working in testing, quality assurance and manufacturing.

Constructed about 90 frames to date (40 touring, 40 racing, 8 tandems, 2 specials), currently geared up for 100 per year; Reynolds 531 d.b. tubing; 16- to 33-inch frame sizes (but larger or smaller can be done without difficulty); brass brazing, silver for brazed-on accessories; spear point lugs; \$200 to \$300 for singles, \$350 for tandems, with eight- to ten-week delivery schedule. Complete bicycles available.

Douglas Fattic, 143 Silverbrook, Niles, Michigan 49120. "Esthetics are as important to me as the structural integrity of the frame. We do full frame repair and painting as well as frame realignment."

Douglas Fattic has traveled widely. He lived a short while in Rwanda, Africa and went to high school in North-

ern India. He has a B.A. in psychology, an M.A. in guidance and has taught frame building at Andrews University. He apprenticed as a frame builder under Jack Briggs, a builder in England who began in 1938 and learned from his father before him. Doug has been building full time for the past year and has completed 30 frames to date. He reports good success building time trial-type bikes with lightweight-gauge tubing.

Constructs 20 to 25 per year; 19¼- to 25¼-inch frames (smaller sizes available using cantilever brakes and modified crown; up to 29-inch using 4130 seat tube); Reynolds, Ishiwata or Columbus tubing; Prugnat, Roto or Haden lugs; \$300 with 6 to 12 weeks' delivery.

Mike Hartley Cycles, 14 Mervyn Ave., Toronto, Ontario M9B 1M8 Canada.

"As a result of my work with frames for smaller people, I have developed a process whereby an incredibly small head tube may be used while still allowing equal-sized, 27-inch wheels to be fitted. I am currently working on a design for a tandem frame."

Mike Hartley, now 20, has been building frames for three years. He is a student of mechanical engineering at Ryerson Polytechnical Institute in Toronto. He learned frame building from a man, an emigrant from Scotland, who once built frames for the now-defunct J. G. Robertson and Co. in Glasgow.

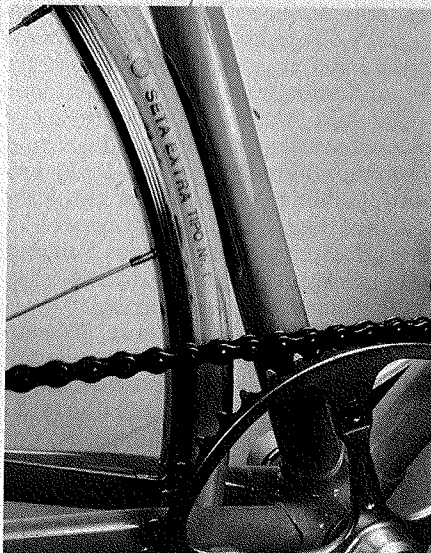
Constructs ten frames per year, racing and touring; any tubing from SAE 1020 to Reynolds; jigs can handle any size; brass brazing and silver solder; \$200 to \$250 with 10 weeks' delivery.

Hi-E Engineering Inc., Harlan Meyer, 1247 School Lane, Nashville, Tennessee 37217. Harlan Meyer used fundamental aircraft design to build a unique aluminum alloy bicycle frame. His methods were based on 25 years in the aircraft field, designing flaps and aileron for the 880 (Convair), the BL 6-rib for Gulfstream II, the center four ribs on the C5A, etc. Although 15 "Cosmopolitans" were built, production was discontinued due to lack of investment capital. The basic frame and fork are aluminum alloy, the tubes 1½ times the diameter of normal frame tubes. The Cosmos weighed just 3½ pounds including the fork.

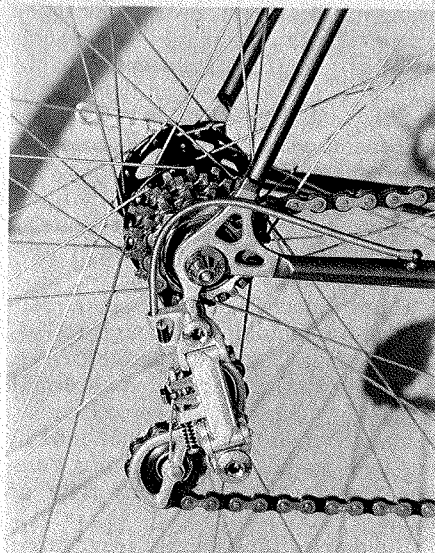
"We are perfecting the bicycle in small steps. Our wheels are the lightest made, and we also make some of the strongest now for tandems. Wheels include Hi-E rims and aluminum alloy spoke nipples.

"The frame is a spring and can be designed to be stiff or limber and in varying degrees. When we again produce frames, they will be offered in four or five selections of stiffness as established by a published measuring procedure.

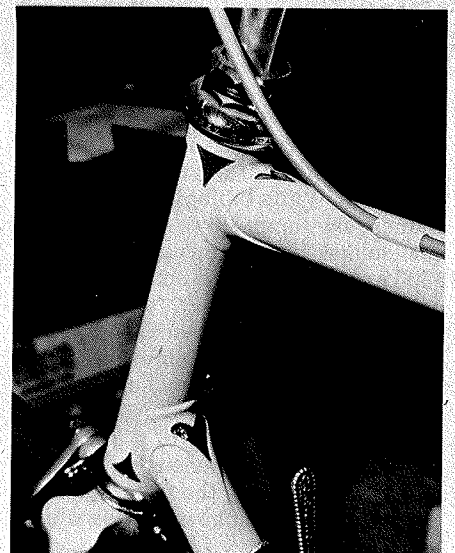
"My lifetime ambition is to be the



RRB Cycles: Custom radiused cranks and chainwheel, 18-spoke wheel on a pursuit frame. Check the seat tube.



George Wilson: Wilson produces his own line of investment cast dropouts and lugs as well as frames. The dropouts shown here weigh but six ounces. (Frank Pefley photo)



Ken Knowles: Heart-shaped lug cutouts are a specialty.

first man to fly under his own power around that figure eight. I know how to build the plane and will do it if the finances permit before I get too old!"

Fifteen constructed, including one ladies' frame; 21- to 25-inch frame sizes; structural aircraft rivets for lugs; average cost "too much," in volume \$400.

Ken Knowles, Prospect Hill, Canaan, New Hampshire 03741. "I only make a few frames a year since my machine shop work is much more profitable. I have made fixtures for every operation and I believe my frames are as near perfect as can be made.

"Here is an example of the pains that I take to ensure a strong frame. When the stays are to be cut for free-wheel clearance, the stays are reamed and an alloy steel tube inserted and silver soldered."

Ken Knowles, who has cycled for ten years, has an M.S. degree in engineering and has owned and operated a

machine shop for the past five years. He was previously involved in stress analysis for ten years.

Ten racing and touring bikes constructed to date; Reynolds 531 d.b. tubing; 18- to 27-inch frames; silver solder used exclusively; Prugnat Special S lugs; \$300 average cost with 18 months' delivery time.

Tom Ritchey, 914 Moreno Ave., Palo Alto, California 94303. "My customers most appreciate the personal appointment I have with them in order to build them the exact frame they have in mind.

"However, I plan to introduce standard, noncustom frames for touring and racing in 1977, using the geometry and dimensions my customers and I have been most satisfied with.

"My interest is in racing frames, and the name of that game is to make it lighter and yet as strong. My frames, on the average, are about 1/2-pound lighter than other standard frames us-

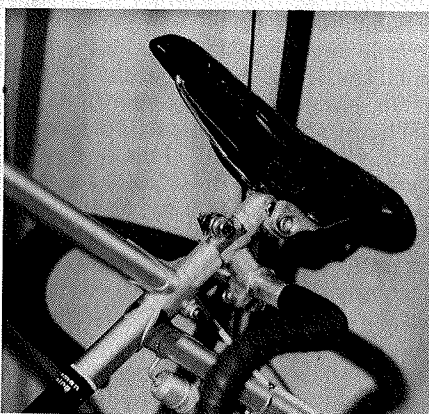
ing the exact same materials. I accomplish this by making my own bottom bracket shells, fork crowns and tips and by thinly filing my lugs. I also use very light building materials.

"I make two special items that save additional weight: a fork stem that's made of chrome-moly and weighs only three ounces (11-cm length), thus saving one-half pound over a same-length Cinelli stem, and a seat post and undercarriage that fits onto a Unicanitor or Ideale saddle. This item replaces the seat post and steel undercarriage and saves an incredible 15 ounces over a Campy post. Both of these items have been race-tested the past year."

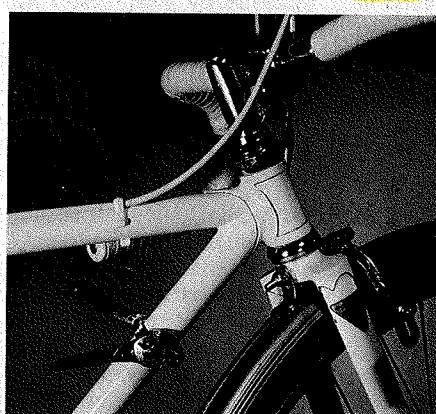
Tom Ritchey is 20 and has been building frames since 1972. He has been racing since 1971 and was on the Junior World's team in 1974.

Constructed 100 to date: projects 50 per year; Columbus or Reynolds tubing; 19- to 27.5-inch frames; silver soldered lugs, tips brazed; Prugnat and Nervex

Stinsmen Racing: Midsection construction on a tandem.

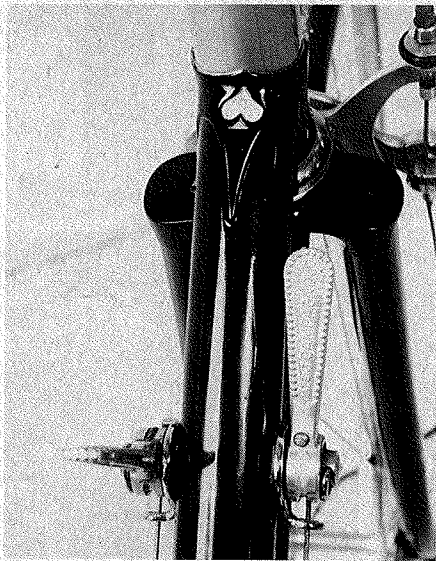


M. Hartley: The head tube is only 2.2 inches in height. Lug is made by MHC in Canada. (Bill Huffman, Toronto, photo)



Ballard/Gould: Custom seat stay arrangement. Cut-down lug reinforces top edge of tube. The joint is an internal lug.

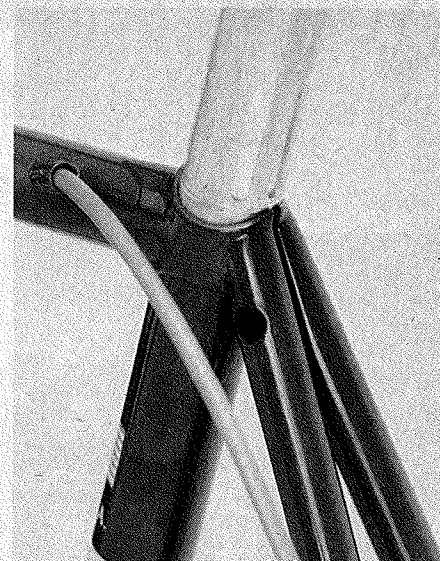




Dan Sparrow: Fancy, hand-cut lugs.



Romic Cycles: Quality stock frames at a reasonable price is the goal of this Texas company.



Dwight Safter: Special features include hidden cables and unusual seat cluster design.

lugs; \$350 with three months' delivery. Romic Cycle Co., Inc., Ray Gasiorowski, 4434 Steffani Lane, Houston, Texas 77041. "Ray's main goal in starting Romic Cycles was to offer American cyclists well-constructed frames at reasonable prices. No shortcuts are taken and his finished product is beautiful and well-designed. While he does build many custom framesets, the company was primarily started to offer stock frames of fine quality without having to go the custom route, unless the individual has particular needs or has a size problem.

"We offer frames, full bicycles, and our daughter Deb has become quite expert at wheel building."

Ray Gasiorowski, 47, worked as a design engineer for Schwinn for eight years and chief engineer at AMF Cycle Division for 15 years. Prior to that he was among the top-ten BAR cyclists in 1949, '50, '51 and '52. He was with the Special Services in the U.S. Army and

did quite a lot of cycling in Europe. Many races were ridden with a cycle of his own manufacture.

Constructed 1,400 frames to date, now producing 550 per year; 18½- to 27½-inch frames; silver solder; Bocama lugs; four to six weeks' delivery.

RRB Cycles, Ron Boi, 38 Greenbay Road, Winnetka, Illinois 60093. "This magazine has often encouraged those of us who must contend with that domestic misapprehension that the lone test of quality in cycling gear is a one-way ocean voyage—always west-bound and trans-Atlantic. In past years the inaccessible loftiness of the European hierarchy has too often meant lethargy at the drafting board and slipshod methods of construction in the workshop. We are glad to challenge the old guard. Only an enlightened buying public will support needed innovation, the promise of better cycling for everyone."

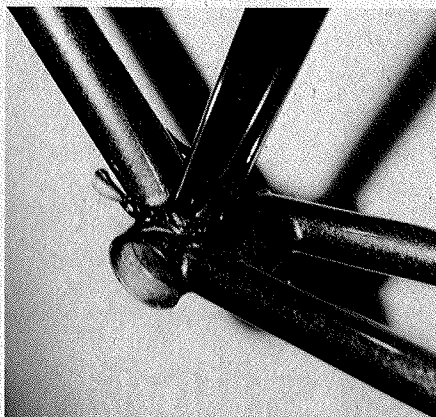
"Ron Boi, 26, founded RRB Cycles in

1971, using his home garage for a shop. Previous work as a pantograph engraver had financed Ron's start in bicycle racing in 1969. Shortly after his initiation into the sport, he joined one of Chicago's few 'pro' stores of that time, Turin Bicycle Co-op, as a mechanic."

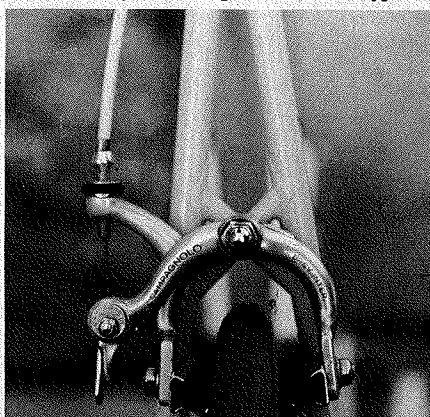
Ron works full time building frames. Brother Walter, 33, worked six years as a product designer and detail draftsman in the industrial parts division of the Eaton Corporation before joining the frame building company. Eric Danstrom, 16, and Ted Schatz, 23, work part-time.

Constructed 158 frames to date: 48 touring, 107 racing, 2 tandems, one unicycle; 85 frames projected for 1977; (tubing in order of preference) the complete Columbus series, Super Vitus, Ishiwata, SAE 4130; 16- to 20-inch frames for 24-inch wheels and 18- to 29½-inch for 27-inch wheels; silver solder for lugs, crown and bottom (Continued on page 70)

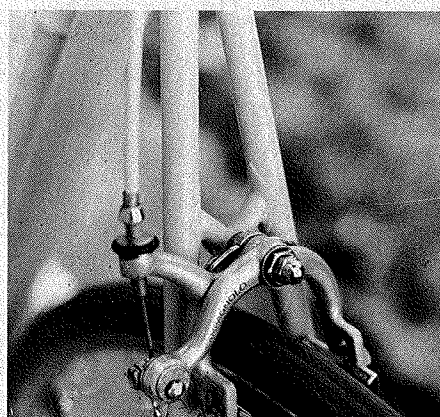
Tom Ritchey: Note the unusual bottom bracket reinforcement.



Ernest Atkinson: This 57cm was built with A.D. Stump vertical dropouts, 74/75-degree angles, a 37.5-inch wheelbase, fixed seat post and "X"-type

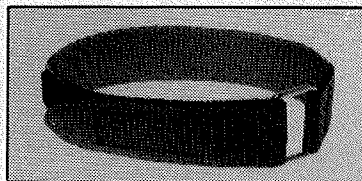


brake bridge with diamond stiffeners. Tubing was Columbus SL with SP fork blades and chain stays.



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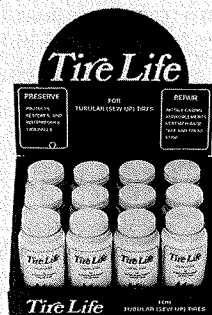
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(Continued from page 34)

bracket and brass brazing for the brake bridge and dropouts; Bocama Professional lugs and Vagner crown are standard (Super Vitus forged crown and either Haden or Folsom precision-cast bottom brackets are optional); \$245 to \$400 bare with 6 to 15 weeks' delivery, depending on time of year. Tandems sold fully equipped only; prices range from \$1,650 to \$1,750.

Dwight Safter, Box 161, Chicago, Illinois 60690. "This is going to be an interesting year for frame builders. I have seen a visible reduction in the emphasis on imported frames as the home-built stuff has become available. Now the question that haunts any commercial frame builder is how much competition can be expected from the backyard builder.

"It, of course, isn't that hard to build a rideable frame. Practice only makes perfect in terms of appearance and alignment. If the rider is not discriminating, he can ride any old crooked collection of tubes and like it.

"I have seen four commercial frame builders pack it in, in as many months. The reasons are boredom and being undercut by the backyarders."

Dwight Safter has been a full-time bike mechanic since 1966. He builds Turin Group frames and does a handful of his own frames on the side. "I try not to do very radical geometries in the belief that they don't really respond properly to the riding that the majority of Americans *actually* do."

Constructed 23 to date, touring and racing, and a tandem in progress; projects six for the coming year; Columbus and Super Vitus 971 tubing; any size to 29 inches; silver solder at lugs, nickel/silver at fork ends; Prugnat S or I or Nervex Professional lugs; \$420 with two to four months' delivery.

Serotta Cycles, Ben Serotta, 35 Maple Avenue, Saratoga Springs, New York 12866. "I've been producing frames for about four years. Originally it was a very small part of my work. Building frames and operating my retail store, The Bike Shop, at the same time pre-

vented me from concentrating on the building. Now I build full time. My wife, Marcie, who does filing, finishing and detailing, and partner John Vander Horn are fairly recent staff additions.

"We now do all of our own sandblasting and painting. This has enabled us to incorporate an excellent frame repair and refinishing service into our business.

"About 90 percent of our business is with retail stores on a wholesale basis. We are now negotiating with other accomplished builders who might be interested in joining forces here at our location. We have space, equipment and materials to expand in this fashion."

Ben Serotta, who is 23, has built frames for Witcomb of England as well as on his own. His frames feature very traditional styling.

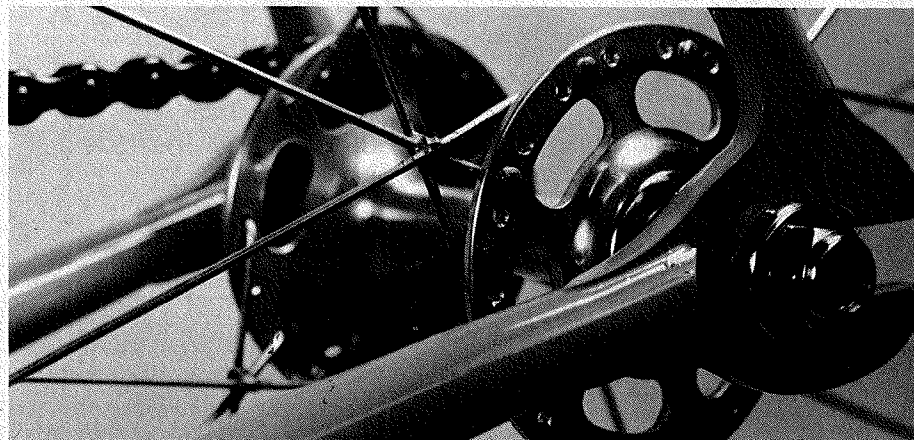
Constructed about 300 to date, now producing 200 per year; Reynolds, Columbus or Tange tubing; 19½- to 26½-inch frame sizes; solder and lug types depend on the particular piece of work and the customer's preference; \$225 with five weeks' delivery.

Sparrow Cycle Frames, 101 Brooks, Missoula, Montana 59801. Dennis Sparrow learned the trade at Geoffrey Butler Cycles of Croydon, Surrey, England. He is 27 years old and previously worked as a shop owner/mechanic for four years. Current experiments involve silver fillets using a special high-strength silver-brazing alloy in anticipation of the availability of Reynolds 753 tubing. "I also do custom refinishing in lacquer, enamels or polyurethane."

Constructed 30 frames to date, mostly heavy touring and road racing; 19½- to 27-inch frames; Reynolds, Columbus, Vitus, Ishiwata or 4130 tubing; low-temp. silver solder where practical; \$250 with 6 to 16 weeks' delivery.

Stinsmen Racing, John Stinsmen, 3436 Lincoln Ave., Allentown, Pennsylvania 18103. "With the building of the Trelertown Velodrome the Allentown area has become the hub of eastern competi-

RRB Cycles: Pursuit frame.



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tive cycling. I have built frames not only for my wife and myself to race, but also for budding young cyclists who may not otherwise have been able to afford a good frame. I do the building primarily as a hobby and feel it is a natural outgrowth of my training in the arts (B.S., M.F.A. in sculpture in welded steel). We feature custom paint jobs in any color.

"Stinsmen Racing has been building and repairing sports and formula cars for 15 years. With our experience in brazing chrome-moly tubing, it wasn't particularly difficult to switch over to the manufacturing of bike frames."

John Stinsmen is 37 and is employed as an art teacher.

Constructed 36 to date: 9 touring, 25 racing, 2 tandems; builds 10 per year; Super Vitus, Reynolds tubing; 19- to 25-inch frames; silver solder on lugs, brazed-on stays; Haden, Bocama lugs; \$225 without headset with two months' delivery.

Stout Racing and Touring Cycles, Ron and Bob Stout, 215 Edison St., Salt Lake City, Utah 84111. The Stouts have been involved in bike racing and touring for many years. Ron is the frame builder and does all aspects of frame construction from blueprinting the design to the final emery cloth finishing. Bob does most of the painting. All frames are clear-coated over the decals and color. The Stouts are co-owners of Transition Cyclery in Salt Lake City.

Constructed 75 frames to date, project 60 to 100 per year; Columbus and Reynolds tubing; 19- to 26-inch frames; Prugnat S lugs; \$325 with four weeks' delivery.

Strawberry Racing Cycles Inc., Andy Newlands, 510 N.W. Third Ave., Portland, Oregon 97209. "I am particularly interested in the metallurgical, structural and bearing theory and practice related to cycle frames and am actively studying these areas. To support this hobby, I act as an importer/distributor of frame building materials from Messrs. Prugnat, Reynolds, Columbus, Gargatte, etc., and also of general cycle parts from the factories of Robergel, Vereinigte Drahtwerke AG, VAR, Mavic, etc."

Andy Newlands, 30, was involved in structural engineering before starting Strawberry in 1971. He has patents pending on a saddle pillar clamp and special reverse vertical stay ends for time trial frames.

Constructed 300 racing frames to date, currently 50 per year; Reynolds and Columbus tubing; 19-inch and up; silver solder and bronze brazing; Prugnat²NF lugs; \$325 bare with nine months' delivery.

George P. Wilson, 27189 Roger Street, Hemet, California 92343. "I put my hand on a rock, looked up at the sky, and said, "I am a frame builder."

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Actually I had a number of frames built, always looking for the perfect geometry. The family and I have gone through 37 bikes since 1938: Phillips, Raleigh, Schwinn, Ives, Olmo, Urago, Allegro, Whitworth, BSA, Automoto and so on.

"I decided a year and a half ago to build a bike. I took six months and built jigs and fixtures as I went. I've built eight to date plus four old tandems (back 15 or 20 years ago). My frames are all short, steep, light, responsive, pretty. Decals are wild. Unless people want otherwise, they get my lugs, drop-outs and recommendations. Shortly, they'll also get my fork crowns, bottom brackets, stems, et al.

"Riding my preferred short, steep designs is a little like getting up on a six-foot surfboard the first time: radically different from grand continental designs."

George Wilson graduated from USC in 1949, having majored in civil and mechanical engineering. He has had 25 years' experience in metallurgy and "lost wax" foundry production. He has been chief production engineer at an aerospace company producing fine aeroframe and missile parts in Hemet, California. George has been a serious cyclist since he won his first medal at the old San Diego track (now a fish-pond) in 1938.

Project 25 frames per year; any tubing, lugs, shape or size. Minimum price \$300 with three to eight weeks' delivery.

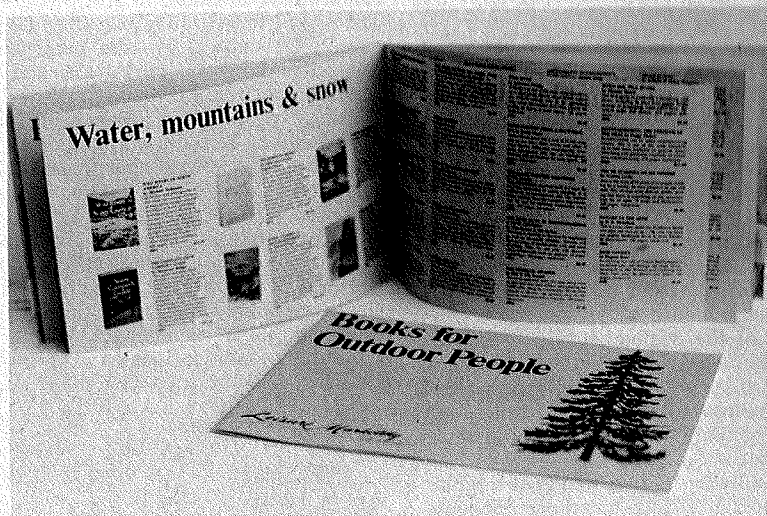
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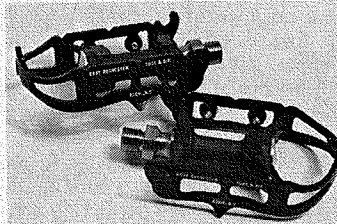
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