DOUBLETALK

BULLETIN OF THE

November - December 1978 Volume 3, Number 2



TANDEM '78

by Al Schaffer, Baltimore, MD

Tandem '78, Hunt Valley, Maryland, can only be described as an outstanding success. Seventy-six tandem teams from as far away as Florida, Texas, Illinois and upper-state New York were treated to typical Maryland hospitality and better than typical Maryland weather. Below-normal temperatures and humidity enabled full use of the nineteen separate tours into Baltimore County horse and farm country during the four-day weekend of Friday, August 25 through Monday, August 28,]978.

The Rally, organized by the Baltimore Bicycling Club's Tandem Division, was arranged so that tandem teams could select from as many as three different tours each day, enabling them to ride as many or as few miles as desired over a variety of terrain. Saturday and Sunday rides centered around catered picnics—Saturday's at Loch Raven Watershed on the lake, and Sunday's at Oregon Ridge Lodge against a background of wooded hills spotted with hang gliders from a local club.

Energy drained by the full cycling schedule was easily replenished in the hospitality room, opened between rides, stocked with complimentary donuts, peanuts and raisins, fruit, pretzles, ice cream, hot beverages and cold cider... and the meal plan: two breakfasts, two picnic lunches and a dinner, all of which were served Maryland family farm style "all you can eat". Sunday evening we enjoyed a complimentary wine and cheese party prior to attending a slide show of previous rallies (always a popular feature at tandem events) and a light dinner at a local crepe and omelette restaurant.

Saturday evening activities began with workshops presented by Malcolm and Jean Smith, Rochester, NY, on "Nutrition as it Pertains to Tandeming" and Anton Sober, Finksburg, MD, and Suter Hudson, Lancaster, PA, on "Amateur's Approach to Building Tandems." An open pit bull roast and seafood buffet dinner was accented by door prizes generously donated by Schwinn, Sentry Solid Lubricants, Bike Warehouse, Hi-E Engineering, and featured a rear wheel donated

by Phil Wood and Cupertino Bike Shop which was won by Jim and Carol Weisbecker, Princeton, NJ. Bob McNair's untimely illness (get well soon, Bob) forced cancellation of his "Tandems of the Golden Era" slide presentation. Slide shows of Tandem '77 and a "Tandem Tour of England" by Bill Tashlick and Joan Valentine provided enjoyable substitute relaxation after dinner.

About thirty-five tandem teams departed for home Sunday after an open pit barbecue chicken lunch. Most of the remaining forty bikes participated in a slow bike race which generated a surprising amount of enthusiasm and fun. The event was seriously contested and the winning team of Winfield Wood, Jr and Cheryl Coffman, Doylestown, PA, beat out Bob and Ramona Cook, Riverton, CT, by barely an inch. Appropriately the first place team was presented with a pull turtle and two cans of oil. Bruce and Beth Burgess, Richmond, VA, failed to make the final heat even after deflating their tire. John and Sandy Granzow, Baltimore's best hope, fouled out after only one crank revolution, and Maryland's dark horses, Al and Ruth Schaffer, rode as if they were in a fast bike race. However, Marylanders can be proud of their own Dave and Patty Baur for winning fourth place prize of a can of oil. We always said the Baurs were the slowest bike in town!

Following the slow bike race (We finally finished the generous amount of ice cream donated by Good Humor Ice Cream Co.) the braver tandem teams took to the Ivy Hill Challenge. Twenty teams completed the eight mile loop which included one of the toughest hills in Baltimore County. All successful teams were presented with a pot of ivy with a plaque made by Hoye and Lucy Breedlove, noting their accomplishment. Special mention should be given to Gretta Hittle (BBC Treasurer) for pushing Bruce (BBC President) up the hill-- we know that Bruce couldn't have done it on his own.

Several people attending the Rally commented that our ride descriptions were never quite as hard as described, or as easy as promised. This observation was apparently also true of the Ivy Hill Challenge, since most of the teams that tried were successful. Many of those that didn't try may have been psyched out by our ride description. Next time don't listen to us.

We have some observations on how tandeming has changed over the past three or four years. At our first tandem rally experience in Newark, DE, 1975, we noted that the participants gave a great deal of attention to the features of different builder's bikes and the quality of workmanship. During the past three years this attention has dwindled so as to be barely noticeable. Quality tandems are no longer unique, but are becoming commonplace. A second observation is that many of the so-called mechanical problems of tandems which were considered almost unavoidable are rapidly disappearing. At past rallies when special prizes were given to tandems having the most flats, the most broken spokes, or the most mechanical problems, the winning tandem had as many as nine broken spokes on one ride, or three or four flats on a

short ride, etc.; at Tandem '78, the special awards made by Anton Sober were won by a team which only had two broken spokes the whole weekend, a tandem having only one flat, and a bike with a cracked rim. Tandems should no longer be thought of as a mechanic's headache. We are on the way to the same peace of mind that our single bike friends enjoy.

The 1979 eastern area tandem rally will be held at Cape Cod, Massachusetts. Ann and Emery Glass are the coordinators and if their enthusiasm in accepting this responsibility is carried over into the planning of it, we can look forward to a delightful weekend. The date is not settled, but it will be sometime in early October, which we understand to be a perfect time weatherwise for bicycling at the cape.

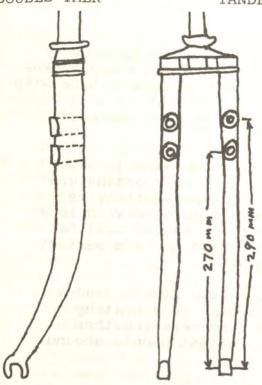
Special thanks to the Baltimore Bicycling Club's Tandem Division for arranging Tandem '78. Tandeming is a healthy social activity, and events which bring tandemers together enable us to spend time with some of the nicest people around.

CANTILEVER BRAKE CONVERSION by Mike Roeder, San Diego, CA

When we set out to design our new tandem, one brake problem needed to be solved. I planned on a disc and cantilever brakes with Mathauser pads, but I wanted to have the flexibility to use 650B wheels. My experience (supported by Fred DeLong's repeated articles) was that 650B's were comfortable, safe, stable and slow. We do a fair amount of touring on rough roads and dirt, and find we do a fair amount of touring on rough roads and dirt, when we our 27 x 1 1/4" wheels to be pretty unstable. However, when we want to go fast, narrow light tires really have an advantage over want to go fast, narrow light tires really have an advantage over the 650B's. I couldn't afford two tandems, but figured we could handle two sets of wheels. The trick was to get the brakes to work.

Frame builder Dana Fenimore (California Cycles, Star Route, Taylorsville, CA 95983) and I began to brainstorm. His normal procedure was to ignore the supplied brake pivot from Mafac, and procedure was to ignore the full depth of the stays and the instead braze in a tube the full depth of the stays and the forks. The first idea that we had was to simply braze on two pivots, but the size differential of the wheels meant the brake arms would hit the unused pivot. We then devised an alternate plan: make two sockets that would accept a removable pivot. Plan: make two sockets that would accept a removable pivot. Since Dana already was accustomed to inserting a tube in the frame, we merely enlarged its diameter, threaded it, and designed a moveable pivot.

Figure 1 shows the fork with both pivot sockets brazed in place. The dimensions are for Super Champion 27" and 650B rims, with Mafac Ref. H tandem cantilever arms. The sockets are stainless steel with a washer brazed to the front surface to allow a locknut to be tightened. The threading is 3/8" x 24 tpi,



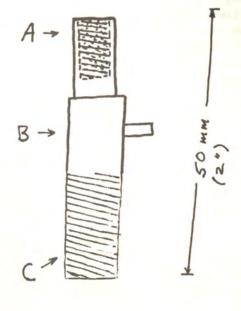


Figure 1

Figure 2

though it can vary with whatever you have handy. A fine thread was chosen to have as many threads as possible on the locknut.

Figure 2 shows the stud itself. Section A has an outside diameter to fit the brass pivot of the Mafac arm; the inside is threaded to accept the Mafac bolt that retains the brake arm. A shoulder keeps the arm from sliding on too far. Section B is solid, with a pin projecting to retain the return spring for the arm. A small plate with a hole could be used, but the pin works well and simplifies the looks. Section C is threaded to match the sockets. Its depth is that of the sockets, plus the locknut, and works out to be long enough to just keep the Mathauser pad from scraping the paint off the inside of the fork.

Like all new ideas, this one has had some modifying. I found immediately after assembly that the pressure of the brake return spring will tighten one pivot and loosen the other, even with the locknut. When this happens, one arm rubs on the rim. A left hand thread could be used on one side; however, I found Lock-Tite to be a simpler solution. It also stopped some vibration, in the form of squealing. In addition, I ground the end of the stud so it bottoms in the hole with pin B in the proper position (horizontal, facing inward on my set-up, but it can vary to adjust return spring tension).

How does it work? Very well! To change wheels, I remove the wheels, loosen the locknuts, and unscrew the studs with the brake arms still mounted. A cap is removed from the unused hole, and the stud inserted. A drop of Lock-Tite and the pivot is secure.

I then tighten or loosen the straddle cable to adjust the brakes. One pad has to be slightly realigned, but the others fit without readjustment. It takes about twenty minutes to transfer wheels and brakes.

Converting an existing system should be no more complicated. It is quite a bit of work for a home garage equipped like mine, but a frame builder or machine shop should have no problem making the parts. Since the sockets run the full depth of the fork and stays, and are fully brazed, there should be no strength loss in the frame itself, and there is no flex whatsoever in the pivots. I feel it is an excellent solution to the tour with comfort/go fast wheel dilemma previously facing tandem owners. Contact Dana or myself for more information or parts - we did build some extras.

RANN TRAILERS

by Malcolm Boyd, Cornwells Heights, PA

One of the limitations of children in a cycling family is that of what to do with the kids while out for a local or not-so-local jaunt. Good solutions to the problem occur at different age groups. From zero to perhaps five years of age children are too young to pedal, or even balance on a saddle for a period of several hours, and are thus consigned to a Bugger-type trailer. Due to their relatively light weight the penalty of impaired hill climbing and acceleration is not too great, although significant, especially when talking to a parent halfway up a hill. Such is the price to pay.

In the later years, perhaps from eight onwards, the back of a small double gents of a mixte tandem is a suitable place for a child. This approach has both good and bad points. A friend who no doubt wishes to remain anonymous confided in me at the top of a hill that tandeming with his offspring was much quicker in hills than riding with mom, due to the fantastic strength to weight ratio of children. While not strong, by comparison they don't weigh a thing. A similar effect is seen, by the way, in grimpers, or mountain specialists in stage racing; the fastest are usually about five feet tall and lightly built. The bad point is the hours spent convincing the other spouse that they should ride their solo bike - a position usually assigned to the wife since her place on the tandem is usurped by the child, and which sometimes results in her virtual retirement from the sport.

It can be seen that, certainly from the ages five to eight, and perhaps later, there exists no good solution for a child's riding. Such was the situation when a Mr. Rann, who I understand was active in the Cycle Touring Club, finally reached a successful answer to the problem. Rann noted the possibilities of drawing some of the exuberant excess energy from his progeny, and set to

work on a trailer that would pull its own weight. The trailer, like all others, is especially suitable for pulling with a tandem. This is because of the tandem's already great weight (compared to a solo) is less affected in terms of performance than a solo.

Do you remember ever trying to make a "tandem" as a youngster by spreading the forks of one bike and placing them over the rear dropouts of another? In case you never tried it, the result is nearly unridable due to the poor connection between the two bikes, the lack of a pivot in the plane normal to the direction of travel of the bike, and the weight ratio of approximately unity between the two halves. Rann perhaps remembered this, and transferred the best of the idea while making a few changes which result in a much more stable machine.

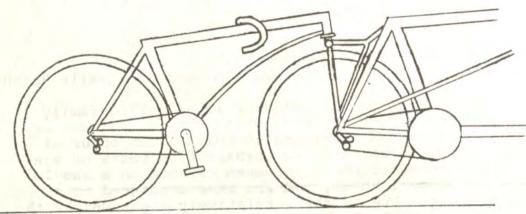


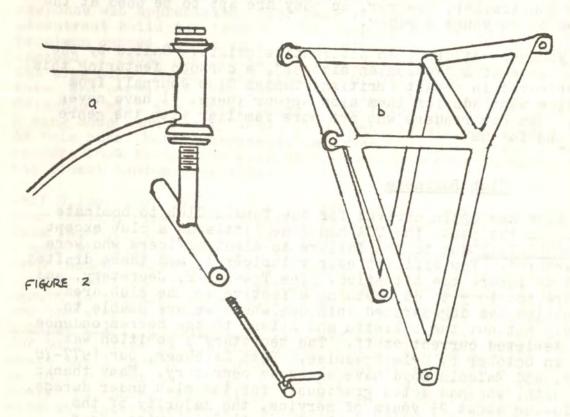
Figure 1

The basic idea, illustrated in Figure 1, is a single bike frame which has had the front forks removed. An intermediate bike with 24" wheels will do or a 19" or smaller frame of 27" wheel size is good. First class would be to make the whole trailer from scratch, but few of us can afford that. With a little scouting around, a solo with mashed forks and/or down tube can be located. The down tube doesn't matter since, as the illustration shows, it is removed and replaced with a pair of bent 3/8" diameter steel tubes. This is the same size tube that tandem builders often like to use for double laterals, so you know who to see. The bend is necessary to clear the rear wheel of the tandem to which the Rann trailer is attached. Notice that this allows the "front wheel" of the trailer to approach the rear one more closely, which shortens the trailer's wheelbase and will cause less torque in cornering. The advantage of making the trailer custom pops up here. The head angle can be steepened from about 70 degrees to nearly 90 degrees which assists in tucking the tandem's rear wheel under the trailer and allows for a slightly longer, more stable hitch on the tandem. Depending upon the exact geometry of the tandem, the top tube of the trailer may have to be lengthened. This is probably not the case only for a curved tube tandem, whose rear wheel is abnormally forward in relation to the seat stays. Clearance between all tandem's rear wheels and the trailer's toeclips is mandatory if you aren't courting disaster. The handlebars may be positioned back from the

steer tube by means of a split tube clamp similar to a seat post tightener. This can be fabricated and brazed on at the same time that the down tube is modified.

The trailer, like any object, is capable of three types of action: pitch, yaw, and roll. The trailer hitch must increase the degrees of freedom of motion from one (yaw, which any bike has in its headset) to two. The second degree is pitch, made necessary by the increase in number of wheels in contact with the ground from two to three. Were roads completely flat, this would be unneeded, but if the trailer and tandem attempted to traverse a pothole without free pitch the tandem's rear wheel would be unsupported until the hitch broke.

Every trailer must have a hitch, and many accidents with trailers stem in one way or another from hitches. They tend to be the weakest link in the chain, and therefore warrent special attention in design and construction.



The part attached to the trailer, Figure 2a, is straightforward. A regular steer tube from a normal bicycle has the fork crown removed and in its place a 6 inch by 1 inch OD tube is centered and attached at right angles. Both ends of the tube are closed by capping with thick 4" to 1" washers. The inside diameter of these washers will act as a bearing surface around a well greased quick release skewer axle.

The part of the hitch attached to the tandem, Figure 2b, is

more complex. Superficially, it resembles a pannier rack, but it must be stiffer than most of these. Basically, it is a support for the horizontal quick release skewer. The rack must be "del" shaped (an inverted delta) to support the sort of forces to which it will be subjected. I suggest that it be attached at the seat stays, rear seat pin, and rear dropout eyes. Those who wish to do it properly will have the support rack permanently brazed to the tandem's rear triangle.

One of our club members has a Rann trailer attached to his triplex tandem and commented that the set-up works out nicely. The effect of the Rann trailer is most noticeable in turns, where occaisionally too much power is applied to the trailer's pedals during the turns, driving the rear end of the triplex around the turn prematurely! His system has the added advantage of teaching his daughters to shift derailleurs, as the trailer possesses a ten-speed transmission. I don't think I would recommend putting brakes on the trailer, however, as they are apt to be used at the wrong time by so young a rider.

For younger children, an alternative exists. Called by the compelling name of a "Watsonian sidecar", a cartoon featuring this trailer appeared in a past (British) Tandem Club Journal; from time to time want ads for them also appear there. I have never seen one. Can our readers who are more familiar with the genre describe one for us?

Club Business

The time has again arrived for the Tandem Club to nominate officers. In the past, the TCA has done little as a club except publish <u>DoubleTalk</u> due to the failure to elect officers who were "self-starters". Few officers ever volunteered, and those drafted preferred to ignore the situation. The Treasurer, Secretary, and Editor were too busy to do anything effective in the club area. This situation has degenerated into one where we are unable to effectively put out the bulletin and attend to the correspondence with our depleted current staff. The secretary's position was resigned in October by Kyle Greenlee. Beth Zeichner, our 1977-78 secretary, and Malcolm Boyd have acted as secretary. Many thanks are due Beth, who has acted graciously for the club under duress.

Following about $2\frac{1}{2}$ years of service, the majority of the present crew is unwilling or unable to continue service. Your editor is not eligible for election by club bylaws, having been elected to that position twice (the maximum.)

Thus, the club has three options: 1)Volunteers will step forward, and we, the past officers will help smooth the transition; 2)the format of the Tandem Club will change to one of producing DoubleTalk as a publication, with paid part-time staff (and a healthy increase in subscription price to perhaps \$10-12 yearly); or 3)the club will cease publication, liquidate its assets and donate the monies to the LAW, as our bylaws prescribe. The choice is up to you; the club is every bit as much your club as ours. Options 1 &

2 we are willing to discuss with prospective officers; in the absence thereof, we will elect to cease publication.

The collapse of the TCA is, to me, a rather distressing thought since I believe <u>Double Talk</u> to be one of the best amateur bicycling publications ever produced. It evidently is well received by tandemists all over the US, and I have seen or heard of many ideas being exchanged or impimented as a result of it. The past two year's officers, who have worked hard to create the TCA deserve more than watching it collapse now. We need you, and we need you now!

Letters to the Editor

Fred Lappe of Skokie, IL writes: About a year ago I wrote to Malcolm Boyd asking for information on an Eisentraut tandem. His response was appreciated. For many remsons I chose not to have mr. Lisentraut build the tandem. The biggest reason was my fear of problems caused when a shop does custom work 3000 miles away. Instead, I chose Ron Boi of RRB Cycles, Kenilworth, IL. I've had the bike since March. The frame is of chrome moly forks and boob tube, and oversized down tube. The remaining tubes are mostly Columbus, with some Super Vitus. The frame is fully lugged, Ron having made each lug by hand. Equipment is all Campy except Phil 48 hole hubs, bottom brackets, and rear disc. Please let your readers know that those willing to spend the extra money will have the finest tandem available.

Jeff Gilmore, of Maumee, OH, who promoted the Americana Tandem Tour through rural Ohio farmland received the following letter from Ted Collings, 34 Tui St., Whakatane, New Zealand: Dear Jeff, I hope you will excuse me taking the liberty of calling you Jeff even though I have never met you and probably never will. I picked up your address from the Calendar Column from Bicycling with regard to the Americana Tandem Tour. By the time you get this letter the event will well be history and I do trust that you enjoyed a super time. I would love to have been in on it. The reason for this letter is the common interest of tandem touring that we share and I thought you might find some interest in what goes on in this part of the world. Please feel under no obligation whatsoever to answer this letter - and please feel free to share it with any interested folk. So having cleared the decks as it were here we go.

My interest in tandems began in 1946 when I was just a lad, and after experimenting with some old bike frames we came up with a model that survived a thousand miles of rough (mostly loose metal) roads of New Zealand's North Island. With some modifications and two more cyclists we made another tandem and the four of us took the ferry across Cook Strait (between North and South Islands) and completed a successful tour of the South Island. We learned a lot. About spokes breaking. And braking requirements. But looking

back we did remarkably well on our home-made jobs. So much that basically I still use the same design today. We solved the broken spoke problem in a remarkable way and I pass the information on just in case it could solve someone else's problem. We had covered perhaps three hundred miles on our South Island trip and limped into a place called Greymouth with the last of our spare spokes used up and our back wheels flapping. But Greymouth was a place noted for horse trotting and the local cycle shop was the man that built trotting sulky wheels. And sulky wheels are built with thirteen guage radial spokes. So we bought a swag of spokes, cut them to length, bent the head in a hole in a metal plate to form a tangent spoke like so

and threaded them to length and spent that night in the Greynouth camping ground rebuilding four wheels. No more broken spokes. Ever. Just as a matter of interest, the rims were 26" x 1 3/4" and filled with balloon tyres. With the roads as they were then it was a very wise choice. Well of course that was a long time ago but I look back with pleasure on those days and my brother (also a Jeff) and I covered quite a few thousand miles in New Zealand. Then I got married, settled down, built a house, raised a family and tandems disappeared into the background - until recently.

About four years ago I retrieved one of my old frames and painted it with some left over paint and with a bit of persuasion from my two daughters we set off with a friend on one tandem (single speed 63 mear) and two very ordinary bicycles. It was a five day trip with very modest mileages but oh what fun. From then on my oldest daughter Pam was hooked and she has been my regular tandem partner ever since. After that I spent a little time building another frame which turned out very well, and over a period of time I have brought it up to a very good touring standard. Five speed gears ranging from 33.6 to 86. Twin centre pull brakes operating from one lever plus a hub brake and special home made aluminium (English spelling) carriers pop rivited together from window extrusions. And we sure have had some great trips. The last one at Master was over an old early coach ro d and t e scenery was fantastic. The road was unbelievably rough in places but no trouble for our tandem. (we call it Merlin after the transfer stuck on it)

However, there is an interesting sequel to all this. Riding our tandem around Whakatane (a Maori name pronounced Fokkatarny) has produced some interest in tandems and there are now no less than eight tandems in Whakatane (Pop. about 11,000) It seemed a shame not to take advantage of such a situation so after a bit of

telephoning and sniffing around we finally contacted all the captains and on Daturday the first of July the first great tandem ride took place with seven of the eight taking part. This is to become a monthly event and with the warmer weather coming up we are looking forward to some great times.

In the meantime I look across thousands of miles of ocean and wonder how the Americana tandem tour went. And how many tandems took part? And where you went and what you did and all that sort of thing? If someone would care to write I would be most happy to answer, but if not well no harm done and good luck to you all. New Zealand is a wonderful place for cycle touring and Whakatane is in a particularly nice place. Within a hundred mile radius we have rocky coastline, subtropical rain-forest, lakes, moutains, waterfalls, thermal activity, hot springs, and even an active volcano 30 miles out to sea.

You will have gathered earlier on that I am no chicken. I shall be 50 years old next birthday but I am enjoying cycling more with every year and am looking forward to many more years of tandeming.

I wish you all the best.

Jeff, in response to Ted's questions, reports: The first Americana Tandem Tour was held on Sunday, June 25, and started from North Baltimore, Ohio at 9:30 AM. Fourteen tandem teams started out and immediately encountered strong 25 mph head winds from the southwest. Several teams promptly returned to their cars, finding the killer wind too much. For those of us who strained on, the day continued overcast with a threat of thundershowers which never developed. At the halfway point we were all glad to reach the snack stop and, amid light rain sprinkles, we wolfed down cookies and lemonaide. It was about this point that the southwest wind shifted southeast which provided the grim prospect of having a headwind all the way back to the starting point, which was exactly the way things worked out. A great deal of enthusiasm was shown for next year's tour, which will be held the first Sunday of summer.

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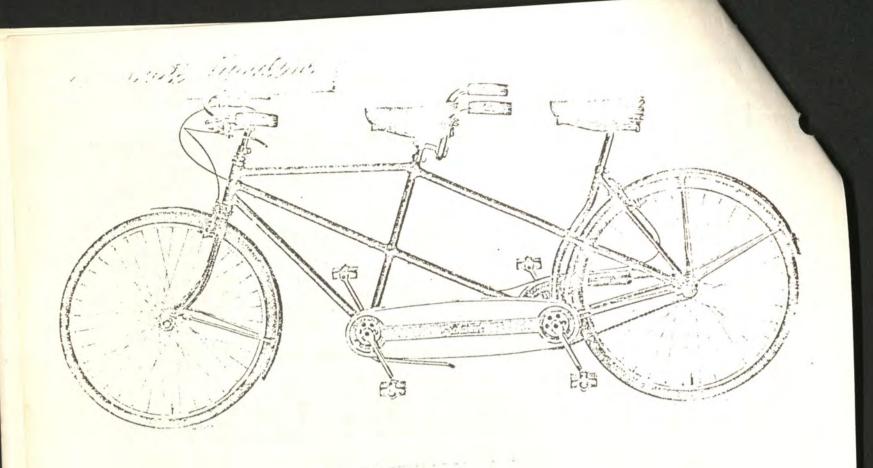
TANDEM INDEX 75¢

(covering all issues of <u>Double Talk</u>, Bicycling, and <u>Bike World</u> thru 8/77)

Double Talk back issues, photocopies for sale: Volume 1, No. 1 \$.50; No. 2 \$1.20; No. 3 \$1.20; No. 4 \$1.50; No. 5 \$1.25; No. 6 \$1.50; all 6 \$6.00. Volume 2, No. 1, \$1.50 (postpaid)

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On a tandem the shortest possible wheel base, consistent with rider comfort, provides the utmost in handleability and safety in traffic and under dangerous road conditions.

A long tandem drags badly on hills and requires more effort to propel. The short tandem reduces riding drag to the minimum and is also much easier to store and wheel around.

Why Lady-Back?

In the heyday of cycling, tandem riding never became popular. All tandems were built lady front and double steering. Women generally are more timid and fearful and the front position plus double steering proved impractical. Nothing could be as foolishly dangerous as double steering, particularly under present-day traffic conditions.

When European builders started to build front steering ladyback tandems some twenty odd years ago, tandem riding achieved tremendous popularity abroad. Take a ride on the back seat of a Schwinn-Built Tandem and the ride free from all steering and operating troubles will quickly convince you of the added safety of the Schwinn Lady-Eack Tandem.

1

For Sale: Set of tandem wheels - Maxicar hubs and hub brake, new 650B tires with Weinmann rims, spare spokes. Very little milage and never a broken spoke. Wheel laced by Jack Taylor. Asking \$75. Don Carlton, 2104 S. Michigan Ave., Caldwell, ID 83605

For Sale: 23½-21½ double mens Gitane, 531 tubing, TA cotterless cranks, 15 speed, (2) rim & (1) drum brakes. \$550. Gary Lusk, 5070 Bunker St. NE, Bremerton, WA 98310 Tel. 206-479-3864

For Sale: Jack Taylor tandem "Marathon" 23-212, has everything, metallic blue, like new \$2500 Don Patterson, 5436 Willowick Circle, Anaheim, CA 92807 Tel. 714-998-6563

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The following figure was inadvertently left out of last issue. It is figure 1 from Harvey Sach's "Town and Country Saga". The page previous is an excerpt from the 1948 Schwinn catalog describing their Town and Country Tandem, which preceded the Paramount as Schwinn's quality tandem.

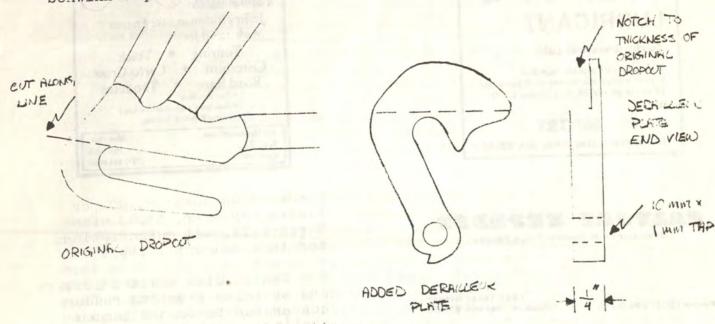


Figure 1. Dropout modifications

CUPERTINO BIKE SHOP, Spence Wolf, prop., custom made tandems exclusively, T.A. drives, Super Champion h.p. & tubular rims in 48 hole spoking, Phil hubs, brakes, etc. Components. T.D. & Trois Etoiles spokes. Wheel building. Mail orders welcomed. Use your M/C or Visa cards. 2098 Sunset Drive, Pacific Grove, CA 93950. Ph: (408) 313 6003. Closed Sunday & Monday. Vice President: Fred Koch, 905 6th St., Hermosa Beach, CA 95959. Treasurer: Glenn Zeichner, 4 Arlington St., Newark, DE 19711. Editor: Malcolm Boyd, 372 Thunder Circle, Cornwells Heights, PA 19020.

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Massachusetts: Bill & Clairbourne Dawes, 55 Hosmer Rd., Concord,

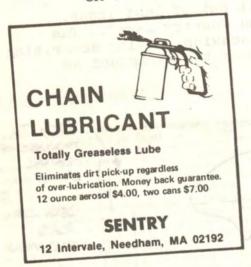
Pennsylvania: Elliot Weinstein, 6273 Large St., Philadelphia,

Kentucky: Deborah & Stewart Prather, 2873 Regan Ave.,

Ohio: Gary Stewart, 1954 Indianola Ave., Columbus, OH 43201. Illinois: John & Marie Kamnikar, 9 S. William Dr., Hinsdale,

Western MT: Rich & Leslie Smith, 710 S. 9th, Bozeman, MT 59715. Idaho: Bill & Jenny Stallings, 3719 16th St., Lewiston, ID 83501.
Washington: Bob Freeman & "B" Garland, 8405 Duncan Ave. S.,

Los Angeles: Cliff Coffey, P.O. Box 755, Placentia, CA 92670. San Diego: John & Donna Goodloe, 8084 Donzee Ct., San Diego, CA 92123.





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Tandem Club dues: 55.00 per tandem per year, \$3.00 after March 1979, all subscriptions terminate August 31,1979

The Tandem Club invites letters and articles from its readers concerning tandems & tandem cycling ... mail to the editor.

PS: We still need a club secretary!

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