

RIDING NORTH

The Journal of the North Yorkshire D.A. of the C.T.C

Issue 6 - Autumn 1982

Contents:

Editors' Notes	2
Obituary	2
D.A.Secretary's Notes	3
A Short History of the British Road (part 3)	4
A Penny a Mile:	8
Tireless on Texel	9
C.T.C. Shop	11
Catering List Additions	11
Artist's Eye	12/13
Puzzle Page	14
B.C.T.C. Final	15
Bring a Bike	15
Some Notes on Scotland	16
A Good Excuse	17
Why You Can Balance on Two Wheels	18
Artist's Eye	21
Choosing a Bike	22
Caught Out in a Storm	23
Answer to Puzzle	23
In Tandem	24

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EDITORS' NOTES

Evidently, the long daylight hours of summer deter most people from writing, for despite our having some material for this issue in hand when the Spring number went to press we have not found it easy to fill 24 pages. Even our old friend Toestrap must be away on tour, for he doesn't keep quiet willingly as a general rule.

We hope our readers will find time during the winter evenings to record a tour experience, or an incident on a Sunday run, to appear in issue 7. Humour is preferable, but any contribution is welcome.

BEBEBEBEBEBEBE

OBITUARIES

Regretfully we record the death of three ladies who had been involved in the cycling world locally in various ways.

Miss Margaret Bean will be remembered by many members as one of the helpful staff in Fenton's cycle shop, where she will be greatly missed, as well as among the ranks of Clifton Cycling Club.

Mrs Jessie Taylor, with her husband Alwyn, our D.A. President, ran Ferndale Youth Hostel some years ago and will be remembered by many long-service members of the YHA and the RSF. More recently the Taylors kept a small private hotel near the bridge in Malton.

Mrs Margaret Riddell was a good friend to many cyclists, not only in Yorkshire. Constant companion of her husband, Bob, our CTC Councillor, she was his tandem steersman, and was also well-known for her competent handling of their powerful motor-cycle. Margaret was a willing worker in many fields that some might regard as mundane and she will be especially missed by anyone who helped at the annual York Rally - "Would you like a cup of tea, love?" was her usual warm greeting, much appreciated by thirsty stewards. At her funeral, the Lawnswood chapel was packed to over-flowing by cyclists from many parts of the country.

We offer our condolences and sympathy to the families of all three.

WANTED: SELLERS

The cost of printing our journal has been rising all the time yet we have managed to keep our selling price at the same level, but are coming to the point when it must be increased. Even so, it is important that all the copies we print are sold at full value, though it has to be admitted that a small number of copies are distributed gratis to reviewers, H.Q., schools, local organisations and to other D.A.s who usually reciprocate.

Now... we need your services, readers, as our mobile sales assistants. Please ask the editors for a few copies and keep them poly-wrapped in your saddlebag. As you travel around you will meet other cyclists - friends, acquaintances, some who you know as members. Perhaps their interest in cycling or the Club has waned and buying a copy of Riding North could be just the stimulus they need.

A.G.M. TIME

D.A. Secretaries generally find that the Annual meeting comes round so quickly once the Birthday Rides are over and the leaves have turned to russet. 1982 is certainly no exception though the year may not seem to have been so hectic as others we recall.

A new venue is being used this year and the date for your diary is Sunday, NOVEMBER 7th. The meeting will start at 1.30 pm in SAXTON Village Hall, where you will be able to have lunch on arrival with hot drinks available. The hall is on the east side of the lane that leads to Towton.

Saxton is a quiet well-hidden village about 6km south of Tadcaster off the road to Ferrybridge. Nearby is the tiny chapel known as Lead Church and a monument marking the battle site at Towton Moor. In the village you may wish to visit the well-kept church and see the railed tomb to Lord Dacre, who was killed in the 1461 Towton Roses Battle. The village has two public houses, one of which we are sure welcomes cyclists.

D. A.SECRETARY

A SHORT HISTORY OF THE BRITISH ROAD (part 3)

The method of transporting heavy goods from 1500 to 1750 was the stage-wagon, an enormous cumbersome vehicle. Its wheels were very broad so that they would help traverse the muddy tracks; in effect they rolled the mud into some kind of carriage way which would have defeated the later narrow iron-rimmed wheels. Travel was very slow with these heavy wagons, about two miles an hour, even with a team of six or eight horses. After 1750 a transformation took place, the new system relied on the same stage-wagons but it changed horses at specific points along the route, making the journey a little quicker and much easier for the poor horses.

The first stage-coaches were big, heavy vehicles similar to the stage-wagons, no doors or windows, only heavy curtains to protect the traveller from the elements, and no springs until the London-Shrewsbury coach ran in 1774. From 1730 the increasing trade in Britain made it necessary for quicker journeys from one town to another, especially London. Lighter and more comfortable coaches were built, some were even called 'Flying Machines' as they could do nine miles per hour. In 1731, a service started between Birmingham and London, a passenger paid twenty-two shillings and the journey took two and a half days - this was the first stagecoach.

In 1754, Manchester and London were in direct communication with these stagecoaches, the 182 miles being covered in four and a half days. The Liverpool 'Flying Machine' covered 206 miles in three days, York to London took four days, and so the stagecoach routes were developed to connect the main towns in Britain.

John Palmer was the man responsible for the network of fast mail-coaches set up to cover the kingdom. On Monday, August 2nd, 1784, the first mail-coach started its journey from Bristol through Bath to London. It was such a success that the system spread. These coaches were efficient, punctual and well-organised; it was a revolution in travel and within 50 years mail-coaches covered twelve thousand miles in Britain every night. Much has been written about these stage-coaches, and they have always interested me.

With the corning of the railways, the days of the stage-wagon and stagecoach were drawing to a close. When the London-Birmingham railway opened in 1838 the number of coaches leaving Birmingham for London dwindled in that year alone from twenty-two to four. On May 11th, 1840, the last coach deserted the run from London to York, the Great North Road began to decline in earnest, and the final blow came when the Edinburgh mail was taken by rail in 1842. What a sad blow it must have been for all the Inns and Coaching Houses that had provided food and shelter for passengers, drivers and horses for so many years. And so ended the era of the galloping stage-coaches, leaving almost empty roads.

Now we come to the two Scotsmen who revolutionised road building, Thomas Telford, born in Eskdale, Dumfriesshire, in 1780 and John McAdam, born in Ayr in 1756. A Telford road cost £1,000 a mile, a lot of money in those days, but for this sum he laid a road of unparalled smoothness and durability. The road was graded with a slope from the centre to ensure good drainage. On this base a layer of smaller stones were laid seven to ten inches deep. This was compounded with a horse or steamroller and with the wheels of the heavy traffic until it locked together as a solid mass; remember, no rubber tyres in those days. McAdam was a copyist, using methods already being used by Telford, Rennie over his bridges and by Pierre Tresaguet in France, but it was his energy and attention to detail that won him such a wide following. He died in 1836 and Thomas Telford followed him the next year, and so the two men most responsible for making possible the speed and reliability of the stagecoaches passed away just as the railways were taking over from the roads.

The coming of the railways did not stop the road improvements but the impetus went out of the business. Private and commercial vehicles grew in number, but through traffic almost vanished from the roads between 1850 and 1880, when a few energetic cyclists began to appear, to make excursions from the towns and villages on their 'ordinaries'. Steam traction engines were a commercial proposition about the 1860s and they played havoc with the macadamed roads which were meant to carry traffic up to three tons and these machines were around ten tons. The real destructive element was not so much the heavy steel-shod wheels but the light fast motorcar wheels which were making an appearance. All the road builders had relied on slow, iron-tyred

wheels to roll the surface flat and fill in the crevices. Now we have the motorcar which caused a sucking action with its rubber tyres and threw dust in all directions, covering everyone and everything in a fine white dust that should have been binding the road surface together. Apart from the water cart that was a familiar sight in our boyhood days little could be done. They even tried spraying the roads with oil at one time.

Tar had been used as early as 1838 on a stretch of Oxford Street, which was laid with wooden blocks sealed together with tar and a thick dressing of hot pitch on top. This made a nice quiet road but the surface was too smooth for horses. The first experiments with a top dressing of tar on ordinary macadamed roads were done in a small way in the 1900s, the tar being poured from a large-rosed watering can. Eventually a more durable process was to mix tar with the McAdam-type small stones and place it on the road while still warm and then roll it into a hard mass by means of a steam-roller. With various improvements in techniques and mechanisation, the same method is used today.

Between 1890 and 1895 the motor-car was developed quickly in France and Germany but not in Britain. The Hon. Evelyn Ellis and Sir Davis Solomons brought cars over from France (a Panhard-Levassor and a Peugeot) and drove them through Windsor at 12-14 mph and so the age of the horseless carriage had arrived. Motor cars were imported from the continent in 1895 and the Home Office and Local Government Board formed the Self-propelled Traffic Association in that year. This caused much confusion giving speed limits of 12 mph (raised to 20 mph in 1903) weights of vehicles, tyre widths etc., so the Act did little to encourage the use of a motor-car but it did make motoring legally possible on our roads. Some agencies were set up to import motor-cars and in due time an English company, Star Manufacturing Co. Ltd., of Wolverhampton, began making a Berry-type car and so we have this build-up of cars taking over the British road. It is estimated that there were 250,000 mechanical vehicles on the road in 1914.

In 1919, a Department of State for Transport was set up in Britain, and the County Councils took over road maintenance from the Parish Councils. In 1920 we had the Road Act which created the Road Fund to finance these

roads. The Finance Act of that year introduced a new system of taxation, registration and licensing of motor vehicles. At the same time the roads were classified A,B and C and in 1922 a numbering system was introduced for the first two classes, the A and B roads working clockwise with London in the centre. The Great North Road became Al, the Dover Road A2, Portsmouth Road A3, Bath Road A4, Holyhead Road A5, and the Manchester, Carlisle Road A6. The great roads of coaching times were thus formalised. We can all remember the coming of the motorways with the M1 and slowly they are spreading across Britain. We cyclists are grateful that these motorways take a lot of traffic away from the roads we use and know so well.

As motor cars improved in performance and speed limits were increased, so the cycle was improving, from the Dursley-Pedersen 3-speed cantilever frame cycle of 1902 to,the short wheelbase lightweight multigeared tandem of 1937, then to the latest modern fast super-lightweight cycle that we ride today on a network of roads which have an interesting history as we have seen.

And what of the roads and means of travel in the future? We have these fast motorways, but wheeled traffic is so uneconomical with its friction and drag on the road - it is bound to be superceded by another means of overland travel. The large motor companies have already produced experimental vehicles riding on a cushion of air. Is the next step forward a huge network of 'low-ways' like long gutters spanning the countryside to accommodate these new vehicles that ride on air? And what about the cyclist, will he be riding on the disused highways as we do now on the old railway tracks? Only time will tell.

PENTUR



A PENNY A MILE?

A recent Which? report looked at hobbies, among them cycling, though it is not clear whether it was considered purely as a sport, recreational or a mixture.

However, the average annual cost was given as £95 which may seem rather a lot, but let us examine it in more detail. As the report explains, the figure does not include initial setting-up costs - presumably cost of cycle, clothing and the like. There is no indication of the miles covered in the year but if we take the quoted time spent on hobby of 9½ hours (not necessarily all riding) and assume 50 weeks a year, then the miles covered at average, say, 8 mph would be 3800. The cost per mile works out then at $2\frac{1}{2}$ p.

Recent studies by a CTC Councillor into the cost of cycling have come up with a figure not far above this -2.7p, comprising 0.8p running costs, 1.4p maintenance costs and 1.5p peripheral costs. You may have the opinion that 3800 miles is a low figure, and so it is for an enthusiast, but it could be fairly typical for those cyclists who have a greater interest in the hardware than in where they go or what can be seen. Taking 5000 miles as the annual mileage of many touring riders, the cost per mile may come down slightly, but then greater use of tyres must to some extent offset this.

Perhaps you have been thinking that the cost of cycling was quite low and the figures presented as they were in Which? magazine may have set you ruminating. Maintenance costs can be reduced by learning to "do it yourself". Books on cycle maintenance are available through the CTC Shop, (see page 11). Remember that the cycle dealer has to pay his mechanic's wages and 'time' is expensive. A typical charge for having a puncture repaired is £2.50, whereas the cost of a new inner tube is around £1.50 and a puncture repair kit which will mend up to a dozen tubes can be bought for less than £1.00.

How about keeping a check on your own cycle-related expenses and reporting on what you find in some future issue of Riding North.

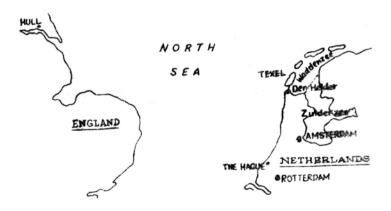
TIRELESS ON TEXEL

Texel (pronounced "Tessel") is the southernmost island in the Waddenzee off the coast of Holland. Chris Gray and I had decided to get away from the bustle of the towns and a particularly hectic Chamber Choir tour - our reason for being in Holland. On our second 'day off' therefore, we headed north by train to Den Helder and caught the ferry to the island, paying 7 guilders return fare as foot passengers.

After a pleasant twenty minutes - there's a bar on board!-we disembarked to find ourselves at 't Horntje and in the middle of no-where, or at least in the middle of a 'ghost' spaghetti junction. Standing forlornly in this veritable wilderness were a few sad looking bus stops which wore an air of never having seen a bus for hours (indeed we saw none at all - anywhere.) Gloom.

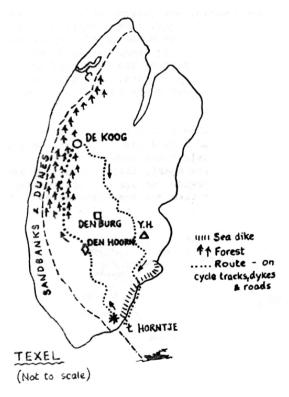
"See what I see?" said Chris, not attempting to hide his glee. I turned, and there, amazingly, like a bizarre oasis, stood a hut with what appeared to be HUNDREDS of bikes clustered round it like calves at feeding time. We wandered over to negotiate the hire of a pair of the beasts; four guilders, no deposit, "no extra passengers, no riding on the dunes or the sand or in the water and be back by 9 pm." (it was then 4 pm.)

Although the man in the yellow wooden clogs couldn't speak English, he certainly had a good eye for an inside leg measurement - one glance and he'd sized both of us and pulled out two bikes. A species apart, they had 'sit up and beg' bars, a saddle too far forward for our liking, coaster brake and single gear. Riding them was something else!



Impossible to freewheel with the feet relaxed, since this gently applied the brake if I wasn't ultra-careful. Once we got the feel of these odd machines, which was surprisingly quickly, they went like a dream, even though heavy in construction. The nameplate on the bikes said 'Gazelle' - I'd hate to see their elephants.

Virtually no motor traffic to speak of, we nevertheless followed the meandering cycle paths, which at times struck off through woods scented with wild rose and honeysuckle, intoxicating. We rode via Den Hoorn and De Koog returning via dykes and cycle tracks to 't Horntje by 8.15 pm having ridden around 25 miles. Incidents abounded; flat tyre, no pump or puncture outfit, ancient local pumped up tyre with what appeared to be a dynamite detonator! One crash -responsibility 50-50 - I stopped with little warning to Chris, who had his nose buried in the map, no harm done.



Avoiding Den Burg, the main town, by a devious and circuitous route we passed the Youth Hostel which, would you believe, is on the only hill on the island! The lad who sailed round the corner riding solo tandem, /one foot insecurely on each saddle, hands on the bars, comically shrieking "Goeden-avond" (good evening) as he teetered round the next bend. Very welcome was the 3 egg and ham sandwich at De Koog.

Texel is an ideal place to cycle if you like wildlife, on there are many bird reserves (accompanied tours). The whole island, approximately 25 miles long can easily be 'done' in a day,

but why rush when there are camp sites and the Youth Hostel? There is so much to see; the little towns, dunes, woods, dykes, (some of which we cycled on), polders, (areas of land re-claimed from the sea). De Rade, the sea dyke, is in itself worth seeing, if not for the waterfowl nearby, then for the feat of Dutch marine engineering - we realised that much of the time we'd been below sea level!

One observation I made was of the continual 'downhill' phenomenon. I was convinced I'd have to 'pay' for all the freewheeling - but no! The place is so flat (except for the Youth Hostel) objects appearing far away are in fact quite near. Puzzling for the eyes.

If you dislike deserted roads, easy cycling and beauty, Texel is not for you. Me and Chris? We'd go back tomorrow if we could.

SANDY CARLSEN

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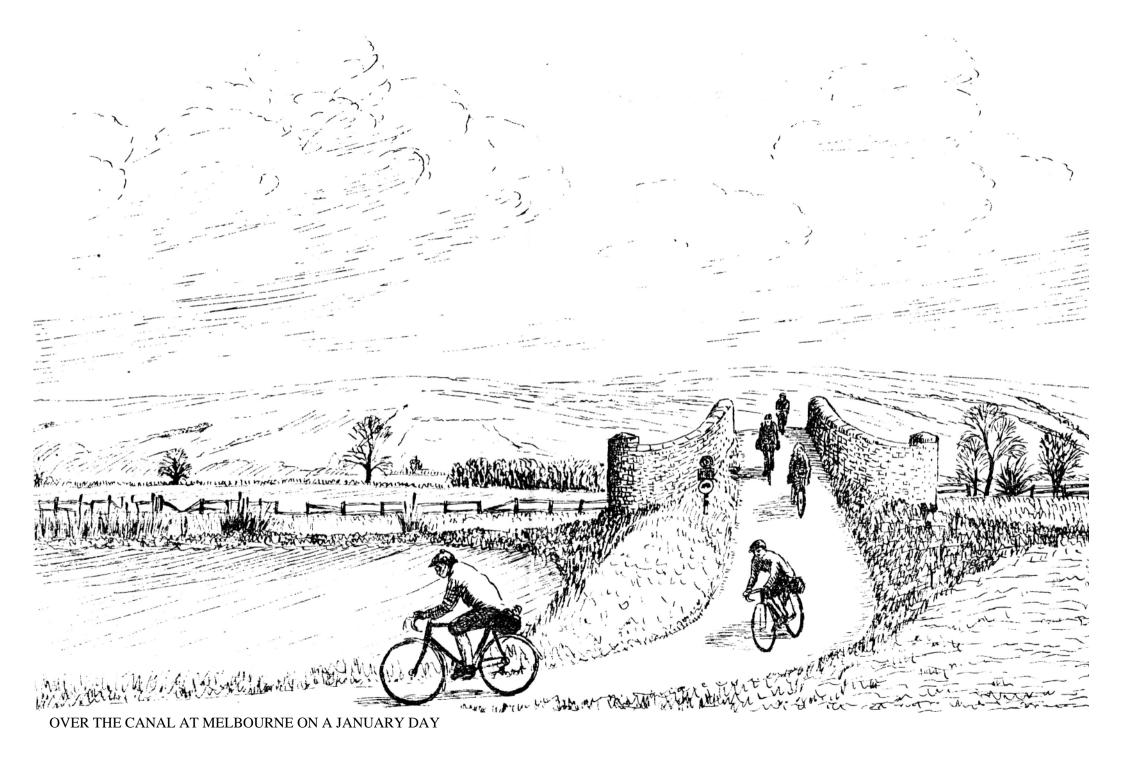
C.T.C. SHOP.

A wide range of goods (books, guides, maps, bags, badges, clothing and miscellaneous) is available from the CTC Shop. A full list of items is printed in each edition of CYCLE TOURING. Why not save on postage costs and give the D.A. a bit of commission by ordering through your local 'shop-keeper', Keith Wray, 41 Hawthorn Terrace, New Earswick, York Y03 8AP. Tel. York 769117.

ADDITIONS TO THE CATERING LIST

BOROUGHBRIDGE - Easdale House, Horsefair.

EASINGWOLD - Pete's Diner, Long Street



PUZZLE PAGE

Write the answers to the clues in the first grid, then put each letter into the appropriate square on the second grid. You should then find a quotation from "The History of Mr. Polly" by H.G.Wells.

A. Molar.	18	67	30	113	39					
B. Try hard.		3	144	20	127	66				
C. Front end of pig.	8	52	13	72	130		_			
D. Piscine.	17	104	32	114	38					
E. Public service vehicle.	53	121	21	27	1	80	131			
F. Pure in thought and deed.	29	19	40	28	9	11		1		
G. Lodestone.	132	99	22	35	143	123				
H. Fictitious narrative.	98	4	139	111	48					
I. Intellectual exercise.	23	147	55	2	150	103	90			
J. Light sailing vessel.	112	6	88	125	76		1	J		
K. London terminus.	68	92	101	95	74	116	97	26	77	149
L. Multicoloured arch.		34	45	105	58	96	54		<u>I</u>	
M. Mother's brother.		86	62	37	119			1		
N. Sewing implements.		82	120	94	63	110	122			
O. Front of leg below knee.	91	5	129	83				1		
P. Writes white.	60	10	126	69	51					
Q. Land of the Pharoahs.	64	106	138	41	33					
R. Ambassador.	108	73	142	16	78					
S. Arrest.		128	102	133	115	44				
T. Fertile spot in desert.		25	107	59	118		4			
U. Large snake.		61	36	24	124	137	1			
V. Medicinal draught.	65	136	7	148	79	46				
W. Mischievous.	75	57	50	47	81	15	145			
X. Channel island.	12	85	14	135			1	_		
Y. Coolness in danger.	31	43	134	109	70					

Z. Sea bird.

1	2	3		4	5	6	7	8		9	10	11		12	13	14	15	
16	17		18	19	20	21	22		23	24	25	26		27	28		29	30
31	32	33	34	35	36	37	38		39	40	41	42	43	44	45	46	47	
48	49	50		51	52	53	54		_	55	56	_	57		58	59	60	61
62	63	64		65	66	67	68	69	70		71	72	73		74	75	76	77
	78	79	80		81	82	83	84		85	86	87		88	89	90	91	
92	93	94		95	96	97	98		99	100	101		102	103	104	105	106	107
	108	109	110	111	112	113	114	115	116	117		118	119	120	121	122		123
124		125	126	127	128		129	130	131		132	133	134	135		136	137	
138	139	140		141	142	143	144	145	146	147	148	149	150					

The answer can be found on page 23.

* * * * *

B.C.T.C. FINAL

Congratulations to Anne and Keith Benton, York Section, who successfully completed the course at the British Cycle Touring Competition at Taunton on September 11/12th. At the end of the second day Anne finished in 34th place with Keith just - a point ahead in 33rd place.

* * * * * *

BRING A BIKE

There is to be a 'Bring a Bike' weekend at Westerdale Youth Hostel on October 15/16th. The format is similar to last year with a talk by a cycle dealer, slide show and a selection of full day rides on the

dealer, slide show and a selection of full day rides on the Saturday. Members should arrive on Friday evening to take full advantage of the activities planned.

Also at the Hostels; Batley/Dewsbury Section of West Yorkshire D.A. would like to join other Sections for Hostel Weekends. Their programme for autumn includes weekends at Kettlewell on October 16th, and Linton on November 6th.

SOME NOTES ON SCOTLAND

Cape Wrath: The start is Koeldale Ferry on the Kyle of Durness, this is 1½ miles southwest of Durness. There are three routes to Durness and Bonar Bridge is the starting point for all of them. The first takes one along Glen Oykel to Loch Assynt, then by Kylestrome Ferry and Scourie, (where one will note the most northerly palm trees) to Loch Laxford from where Durness is nineteen hard miles. The second route takes one to Lairg, then along Loch Shin, Loch Merkland, Loch More and Loch Stack to Laxford Bridge and then to Durness. The third route also goes to Lairg, but then to Altnaharra, through Strathmore, past Loch Hope and Loch Erriboll arriving at Durness from the east

Having reached the ferry one has to telephone the Ferryman, and he is very temperamental: When I was there, he came for the lighthouse keeper and took him alone, then came back at 10.50 a.m. for me. There were now three of us, as I had been joined by a father and son from Leicester. The pier at the Durness side goes well down the beach, but at the Cape side is very short. The ferryman was very terse with instructions, "You must be back at 3.30." We stripped the bags off the bikes and put them in the well of the boat, the bikes were carried crosswise over the gunwales. At the other side it was a carry over the rocks for about 50 yards, The distance by 'road' after the ferry is 23 miles return, of which most is 1 in 7 up and down, the high points about 450 ft. The 'road' is a 7ft wide strip of tarmac with grass in the middle, and some potholes. We were back at 2.45 p.m. and by that time the tide had risen to the pier so all was well.

The Capel Mouth: This is a route from Glen Clova to Ballater on Deeside, It saves a lot of miles from Dundee and is relatively easy as from the south it only entails about 2½ miles of zigzags up the mountainside to 2,700 ft and the crossing of the Capel Burn. At the summit there is a Landrover track to Loch Muick, about 4 miles, and then 9 miles of good narrow tarmac, mostly down hill. I have cycled this part up and down en route to the mountain of Lochnaggar, but have walked the rest.

Using this route in reverse, crossing with my bike in May 1982, my time from Ballater was 4½-hours. I think it is better done from the south, as some

riding is possible on the Landrover track before Loch Muick. If done as I did it, I would advise boots with Vibram soles, as shoes tend to slip on the grass covered zigzags.

WALTER LEE

(Editors' note: Dear Walter, re your comment on Vibram soles, did you

find out the hard way?)

* * * * * *

A GOOD EXCUSE.

I hate rough stuff riding and never had any intention of riding in rough stuff events, but somehow August 1981 found me starting off with about ten other cyclists for York Section's rough stuff ride. After being chased by wild cows and horses, (well, they seemed wild at the time), falling off on loose gravel, having my legs bruised by an elderly rider pushing past on a narrow footpath and being directed the wrong way at a check point we completed the course. Never did a pot of tea go down so well as the one we had at the end of the ride at Brandsby village hall.

This year I am definitely not riding in the rough stuff event. I have a very good excuse, a broken arm, in a plaster cast from wrist to shoulders I'd like to tell people I did it hang-gliding or climbing in the Andes, but the truth is I fell off my bike, rough-stuffing on a Welsh mountainside.

Now there are some who think it was deliberate, or a conspiracy between the Casualty Departments at Chester and York hospitals, just to get me out of riding in Selby Section's rough stuff ride; but on Sunday, August 22nd I shall be quite happy sitting in the sunshine with a good book while the rest of you set off from Tadcaster.

P.J.HAYNES

WHY CAN YOU BALANCE ON TWO WHEELS?

I was discussing cycling with my five-year-old son the other day. He rides a tricycle at the moment because, as he said, it is easier to balance than a bicycle. He knows that he'll progress from three wheels to two when he gets older (actually, when his father is willing to buy him a two-wheeler) and then he'll have to learn to stay upright. You could see the logic in it when he asked, "Daddy, why don't you ride a one-wheeled bicycle?" He thinks I'm a slow developer being still on two wheels. I mumbled something about not wanting to become a circus act, but that was no excuse for Andrew. Trying to redeem myself, I explained what was required to balance a bicycle and how much more difficult a unicycle was. This reminded me of something I once read on why it is possible to balance a bicycle at all. It makes an interesting story and there's probably more to it than you think.

I remember learning to ride my first bicycle at the age of 12 or 13 with my father running by my side to hold me up Every time he let go I fell off. After several days of total failure, my exhausted father told me in desperation to steer the way I was falling. The first time I tried it the bike stayed upright and I had no more trouble after that. Steering into the direction of the fall makes the bike travel on a curve. This produces enough centrifugal force to push it upright again, correcting the fall. Sitting quite rigid and not steering at all, as I was doing, allows the bike to fall over.

This simple theory of balancing explains why the ridability of a bicycle depends crucially upon the freedom of the front forks to turn - if they are locked, the bicycle can not be ridden. However, it can not explain why it is possible to ride hands off or why a riderless bicycle will stay up on its own for a considerable time after being pushed off. In neither case is anyone steering in the direction of fall. Also, the bicycle does not really require a concious act of steering while being ridden above walking pace.

We clearly have part of the explanation of why we can ride on two wheels, but there must be more to it than just centrifugal force. Those who have played with spinning tops or gyroscopes will know they spin in the same direction all the time unless disturbed and then they wobble. This wobbling is called precession by scientists. Doesn't the bicycle front wheel behave as a gyroscope when it is spinning? Yes it does. It is not too difficult to discover that the bicycle leaning over causes the wheel to precess. The result of this "wobble" is to turn the wheel towards the direction of fall. This seems to be what we want because now we have a means by which the riderless bicycle can steer itself in just the right way. Incidentally, this is exactly how a rolling hoop stays upright.

So far, we have a combination of centrifugal force and gyroscopic action to keep our bicycle upright. Before deciding we have found the complete explanation however, we should try an experiment just to make sure. Let us mount an extra wheel on the front forks, clear of the ground, so it can be spun in the opposite direction to the real front wheel and so oppose the gyroscopic effect. Such a bicycle will not run riderless. It collapses almost immediately, confirming that gyroscopic action is necessary to keep it upright. This is what we would expect but, unfortunately for our theory, the modified bicycle is fairly easy to ride. It can even be ridden hands off, although this does invite disaster. The gyroscopic forces from the front wheel are sufficient to stabilise the light, riderless bicycle but are too weak to affect a heavily laden one.

There must be something else to add to our theory about why a moving bicycle is so stable. If you are in the lucky position of being able to specify seat and head angles and fork rake when ordering your new frame, you will also have considered how these affect the handling of the bike. Indeed, shouldn't we consider steering geometry in our theory? Yes of course and fortunately it is fairly easy to see what will happen. You know that when wheeling a bicycle holding only the saddle, you can steer just by tilting it. The steering geometry is arranged so the front wheel turns naturally towards the direction of lean. This is how even a heavily laden bicycle will automatically steer in the direction of fall when being ridden and so stay upright.

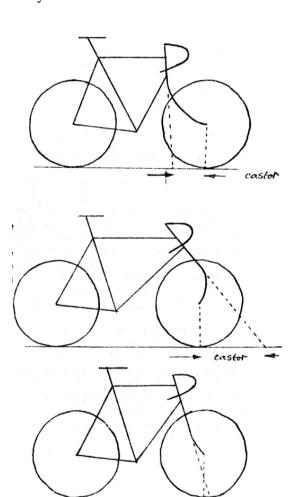
It is therefore a combination of centrifugal force, gyroscopic action and correct steering geometry that allows us to balance on two wheels and feel very safe doing it.

Just to finish off, it may be worth saying a bit more about steering geometry because this is something we can control ourselves. By increasing the fork rake or the head angle (or both) you can obtain a geometry which will not turn the front wheel when the bicycle is tilted.

A further increase in head angle or fork rake and the wheel will turn in the wrong direction. Such a bicycle will be ridable, but will require concious acts of steering all the time to keep it balanced. You certainly couldn't ride it hands off.

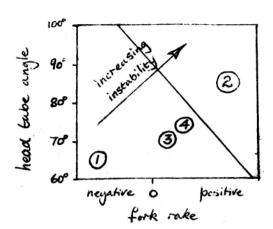
Reversing the fork rake will have the opposite effect and will produce an ultra-stable bicycle that will run riderless/ until it almost stops. / it will also be difficult to ride by an experienced cyclist because it is too stable to be steered in any desired direction.

The bicycles we normally ride are between these two extremes.



These results are summarised in the diagram. The diagonal line gives the combination of head angle and fork rake that does not turn the front wheel on tilting. The rest, I hope, is self-explanatory.

- 1. extremely stable sluggish and unresponsive.
- 2. unstable front wheel turns in wrong direction on tilting.
- 3. normal geometry for a roadster.
- 4. normal geometry for a lightweight tourer giving a more lively feel than 3.



PETER MAIN



South Over Kirby Stephen Common

CHOOSING A BIKE (part one)

I suppose that all members have been asked at one time or another the same question "What should I look for when buying a bike?" and I suppose all have the same answer "It depends what you want to do."

Assuming that our type of club runs are the aim more informative advice can be given. Whatever the type of bike the size must be a first consideration. Various formulae are given in cycling books but as a rough and ready guide divide your height in inches by three and you have the frame size. Obviously if you know you have long or short legs for your height add or subtract up to an inch and if you are still growing add on an inch or so and the frame will serve you longer. There seems to be a strange desire by some retailers to sell 25¼ inch frames to people less than 6 foot 3. inches tall necessitating the dropping of the saddle to crossbar height.

There is a mass of technical jargon available on frame design but the majority relates to racing bikes and is of little relevance except to consider what not to use. The main frame builders seem to be agreed that 72° parallel is the ideal for the tourist. Dawes, Raleigh, Viscount and Holdsworth to name a few all plump for this whilst a few others, such as Falcon and Carlton, offer 73 parallel. A rake on the forks around 2 inches with 1½ inches as the shallowest is the norm with fairly generous mudguard clearances. Clearances can be important when looking at brake fitting and the possibility of catching a foot on the front mudguard during a sharp turn.

The question of the type of frame material to look for can be answered with a number, 531, the number given to TI/Reynolds tubing, but if money is short a frame with 531 forks and carbon steel tubing may be a better bet than 531 main tubes and carbon steel forks. Almost certainly for the touring requirement a 72° parallel carbon steel frame will be better than a 75°, 37 inch wheelbase time trial frame of whatever material it is made.

DKB

CAUGHT OUT IN A STORM

Eight York Section Easyriders had arrived, one Sunday lunchtime in September, at Almscliff Crag after a pleasant run in occasional sunshine through quiet country lanes. The wind had been (almost) in our favour and was getting stronger by the minute.

"Lunch on top" urged the big chap who had taken charge ('Leader' would not be an accurate description, at least on the uphill stretches, of which there had been a few). "The view is terrific, but wrap up well. It could be blowy".

Blowy it was, but the view was worth it. We found shelter on the lee side of the summit and sat eating our lunch, admiring broad landscape from Harrogate to York and beyond.

But as our food disappeared, so did the view. With our backs to the wind, we hadn't noticed the heavy clouds approaching and were not prepared for the deluge which struck us. Some had brought rainwear to sit on and quickly made use of this gear for its prime purpose, but others were not so fortunate. The temperature seemed to drop twenty degrees in as many seconds and it was like having buckets of icy water thrown over us to the accompaniment of a near gale. In moments, rivulets of water were running down rockface and neck of intrepid cyclist.

"Back to the bikes" instructed the big fellow, talking to himself since the rest of us had anticipated the order to abandon crag. More than once, feet slipping on wet turf, one of us took an involuntary seat on the way down to the road, but happily the damage was confined to dignity.

By common consent, we turned for home, the wind kindly having shifted to follow us, but the rain continued for some time, to be replaced by bright sunshine only as we ran into York, feeling decidedly damp.

Strange how quickly time passes when you are enjoying yourselves, isn't it?

MUDFLAP

* * * * * *

Answer to puzzle on page 14:

"But that's the sort of thing that is constantly happening, you know - on a bicycle. People run into you, hens, and cats, and dogs, and things. Everything seems to have its mark on you: everything.

IN TANDEM FOR ALL

You may have heard of people who own or who have access to a tandem taking people who are blind, partially sighted or disabled in some other way, for an occasional ride in the country or around town. And you may have heard just how much fun it is. You also might have heard of "IN TANDEM" which is a group based in London which has, for the last few years, been running a multitude of sporting and recreational events involving the able-bodied, the disabled and tandems. If you have and if you are interested in the idea of "IN TANDEM", but you don't happen to live in London, you will be pleased to hear that "IN TANDEM" is spreading it's wings and is trying to start groups in other towns and cities.

One of the first to get 'rolling' has been York, a city with much to offer the sighted cyclist, but much, much more to offer the handicapped adventurer. The compact nature of the city and the accessibility of the countryside makes for ideal short recreational trips (riding in traffic can be a thrilling experience if you've always had to be led across the road before), and the beauty of the surrounding Vale is not lost on the sightless rider. Remember the sounds and smells of the country can tell an equally vivid story, a story which is usually lost to the easily distracted sighted cyclist. And this is the point of "IN TANDEM", the superficial inequality of the set-up between front-rider and stoker soon gives way to the experience of a radically different way of viewing the world to the benefit of both riders. And, of course, it's enormous fun!

If this idea interests you, or if you have got any bright ideas of your own (for instance does anyone have experience of adapting bikes for the physically handicapped?) please contact "IN TANDEM", either in London at Inter-Action, 15 Wilkin Street, London NW5 3NX (01-267 9471) or if you live in or near York at F.L.A.G., 10 Priory Street, York. (0904-21133).

"IN TANDEM" is for the disabled and you!

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The D.A. Committee would be pleased to hear from any member who may be prepared to play an active role in the formation of C.T.C. Sections in any other parts of the D.A. area, notably Harrogate, Richmond, Scarborough or Skipton. Please contact the D.A. Secretary initially.