



OUT LIKE A LIGHT

TRADE
AND INDUSTRY
By Ed

A prototype axle system? As stiff as a 20mm, but as quick as a QR? Can it be true? We've been lucky enough to try what is literally the first ever Hartlett axle, and all I can say is that despite a huge amount of original scepticism, I've ended up more than impressed. We thought it was only fair that we gave the guys responsible a chance to answer a few questions about their design, but first of all, here's a little explanation of how it works.

Well it may be very simple to use (undo QR, turn axle 30° or so, and then remove), but as for explaining it, that's a bit trickier. Perhaps the best way is to say that at one end of the axle is an arrangement that's somewhat similar to an ordinary bayonet light bulb, albeit in reverse. Rather than having two prongs on the axle, there is a rod fixed into the centre of the dropout, which two cut-outs on the axle then lock onto. This design means that the axle can be removed very quickly, with no need for any unwinding. This is where the Hartlett axle beats any other design we have seen so far, in fact it's so quick that it's even faster than a regular QR (with lipped dropouts). All the QR lever on the axle does is simply lock the whole thing tight, and as far as we could see, there's no way that anything is going to work its way loose. Anyway, enough from me, this is what they had to say...

Dirt: Who are Hartlett?

Hartlett: Charlie Bartlett and Nick Hart, just a couple of riders living in Sheffield.

How long have you been riding?

Charlie: I've been riding on and off since my dad took the stabilisers off! Nick has been riding all his life, but riding mountain bikes for about 10 years.

What inspired you to try to make a revolutionary axle?

Hartlett: We liked the stiffness and security of bolted 20mm axle designs but hated the faff of getting the tools out every time you had a flat or had to put the bike in the car. So we decided to sit down and design something that was stiff and secure, but had all the benefits of a quick release system. The turning point was after a few pints in The Sportsman pub one rainy Wednesday evening.

What type of rider do you see your design benefiting most?

The performance of our design means it's ideal for riders that

need the stiffness and security of a bolted axle but who also favour the ease of a quick release. So anyone from big hitting freeriders through to enduro racers, but most probably for the people like us, people who just like riding.

I hear you've been busy negotiating with several fork manufacturers over the possibilities of them licensing the design, any news so far?

We're waiting on one manufacturer who will be making decisions at the start of the New Year but we have irons in the fire with another fork manufacturer and a significant frame producer. We'll keep you posted.

I also hear that you've allowed some independent lab tests, any interesting discoveries?

Yes, the initial results from testing the torsional rigidity of our design against Manitou's Hexlock system and regular quick release dropout forks were excellent. We'll know more soon, so keep checking our website (www.hartlett.co.uk) for details.

I take it you've put in a fair bit of personal testing too?

For the last 12 months Charlie has logged nearly 3000 miles hammering the daylight out of prototype fitted Sherman forks. They've seen action on local Sheffield trails, technical routes in Chamonix and Verbier, a full month on Vancouver's north shore and two weeks in southern Spain. Nick and others have also been testing an Orange 223DD with a prototype rear axle locally and in Wales.

Will the axle be available as a retrofit for any 20mm fork?

Not for the foreseeable future, we're concentrating all our efforts on getting manufacturers on board to incorporate it into new products.

This prototype is obviously a bit chunky, do you reckon you can sort that out?

We were restricted by having to retrofit our prototypes into existing designs and the result was that it had to be chunky to work as well as it does. If the Hartlett was designed into a product from the outset then this would slim it down by about 75%.

Any other possible improvements?

We'd love the opportunity to produce a prototype that was designed and built from the ground up. In that way we could try some ideas we have for improving the aesthetics of the design and also for standardising the position of the cam lever when it's closed. Aside from that it's simple, safe and intuitive as it is.

Any last words?

Just a big thanks to everyone who has helped us with ideas, testing and support, and if any of you frame or fork manufacturers want to run a prototype trial, then just get in touch!

A final word from me would be simply that I hope this gives some more riders the inspiration to try and develop any 'brainwaves' they have, it doesn't take too much, just a bit of belief and some hefty balls! Go on, take on the big boys. 