

## 1894 CRYPTO BANTAM

BOB DAMPER WANTED TO OWN ONE OF THESE UNUSUAL FRONT-WHEEL-DRIVE BICYCLES FROM THE MOMENT HE FIRST SAW ONE. HERE HE EXPLAINS WHY

ycling as a pastime only became practical with the development in the late 1860s of the high wheel 'penny farthing' or 'ordinary', with its tiny trailing rear wheel. Like its predecessor, the boneshaker, it was driven with cranks directly connected to the front hub. Unlike the boneshaker, the large front wheel allowed a reasonable forward progression for each turn of the cranks. Still, the ordinary was the preserve of the athletic young male prepared to brave the occasional header, a spectacular forward tumble over the handlebars and front wheel.

Attempts to overcome the dangers of the ordinary met with limited success until, around 1890, a number of more practical designs of 'safety' machine started to appear, with smaller wheels and a lower riding position. The new safeties were more suitable and comfortable for children, ladies and the older gentleman, especially when fitted with Dunlop's new pneumatic tyres.

Although most safeties utilised a geared chain drive to the rear wheel, a small band of builders continued to extol the virtues of front-wheel drive. Chief among these was Isaac Watts Boothroyd, proprietor of the Crypto Cycle Company. In 1893, Crypto exhibited at the Stanley Show in London their FD (Front Drive) Safety No. 3, shortly renamed the Bantam. In place of a large front wheel, the cranks of the Bantam

drove an epicyclic hub gear, of a design patented by Shaw and Sydenham in 1882. By this means, each revolution of the cranks turned the small front wheel through more than one revolution, giving the effect of a

## "The Bantam is an iconic machine, being the last front-driver to sell in any quantity"

much larger driving wheel. (Henry Sturmey owned one of these machines and saw the potential it offered for variable gearing, later realised in what became the Sturmey-Archer hub gear.) The Bantam is an iconic machine in cycling history, being the last front-driver to sell in any quantity, although its popularity was short-lived. Crypto ceased cycle manufacture around 1902.

Ever since, I saw one of these bicycles in the Science Museum in Kensington, I had coveted one. I had to wait nearly 40 years before becoming the proud owner of a first-pattern 1894 model, purchased at auction in 2011. A few trips later to Pinkerton Cycle Restorations in Redditch, the Bantam was roadworthy and, after an initial lesson from Doug Pinkerton, I felt brave enough to start practising on my own.

Relative to a modern machine, the

Bantam has some unnerving characteristics, not least that pedalling forces are coupled directly to the steering, making any kind of hill-climbing a challenge. Drive and steering rely on road contact via one small front tyre patch, ameliorated to some extent by the wide (1½-inch) tyres. Also, the Bantam has no fork rake whatsoever, so that road shocks add 'interestingly' to the rider's experience. Last but not least, almost all the weight of the Bantam and its rider is at the front, which coupled with the short wheelbase makes it skittish and prone to tipping forwards. Still, after a few practice spins, I felt confident enough to venture further afield. @

## TECH SPEC

Bob Damper's Crypto Bantam

Bike name/model: Crypto FD Safety No. 3 (Bantam).

Wheels: 24-inch Dunlop Welch rims, Dunlop Junior Champion 24×1½ inch tyres. Front wheel spoked 1×, rear wheel radial.

Transmission: Crypto epicyclic hub, front wheel drive, 66-inch gear. (Crypto geared cycles can be conveniently dated from the hub serial number. Mine is 5148, the third oldest Bantam known.)

Brakes: front wheel plunger.

Saddle: Christy Anatomical.

Accessories: Powell and Hanmer 'Demon' paraffin oil front light.