

Modern Cane Railways of Queensland

Carl Millington's presentation at the Modelling the Railways of Queensland Convention, 2004

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Part 10: Couplings

Four types of couplings are being used throughout the industry.

Hook and ring: This is the original coupling used with advent of sugar cane trains. The hooks simply hook into the ring on the other bin. Most mills started out with type of coupling. Only Kalamia Mill near Ayr still uses this coupling arrangement today on their bins. Other mills still use this coupling on their navy wagons.

Link and Pin: The next development in couplers was a simple cast or forged oblong link that fits into a slot in the bin buffing plate and a pin passed through it. Moreton, Millaquin, Marian, Farleigh, Proserpine, Tully, South Johnstone, Mourilyan, Babinda, Mulgrave and Mossman Mills used this coupling arrangement.

A similar coupler was used by the Innisfail Tramway, and is still found on some navy wagons. Once again some mills may have this type of coupler on their navy wagons.

Dumbell or Chopper: A pin located in the coupler slides backwards and forwards and can be dropped down into another bin's coupling. Bingera and Racecourse mills use this coupling. These couplings also rotate, so they don't need to be uncoupled at the tippler.

Knuckle or Auto: This is a miniature version of the coupling found on the bigger railway systems. An arm under the coupling opens an internal knuckle, allowing coupling and uncoupling.

Isis, Millaquin, Fairymead, Plane Creek, Pleystowe, Marian, Farleigh, Inkerman, Invicta, Victoria, and Macknade mills use the auto coupling.

Transition couplers: Mills that use several types of couplings for their bins, or whose tramway system is joined to that of another who's couplers are different, require transition couplers to be carried by locomotives so any loco can couple to any type of coupler. A good example is in the Mackay area where the four Mackay Sugar sugar mills use Link, Dumbell and auto type couplers. It is common during the crush to transfer cane between mills, thus the need for transition couplers.

Permanent links: Tully Mill permanently couples its 4 tonne bins in pairs, as the standard bin at Tully is the long 10 tonne bin. Each pair of 4 tonne bins is referred to as '1 bin' and are numbered as such. The reason for doing this is that the tippler is only designed for the 10 tonne bin and a single 4 tonne bin can not be held in the tippler. Other mills have experimented with permanent coupling of bins.



Hook and Ring coupling.



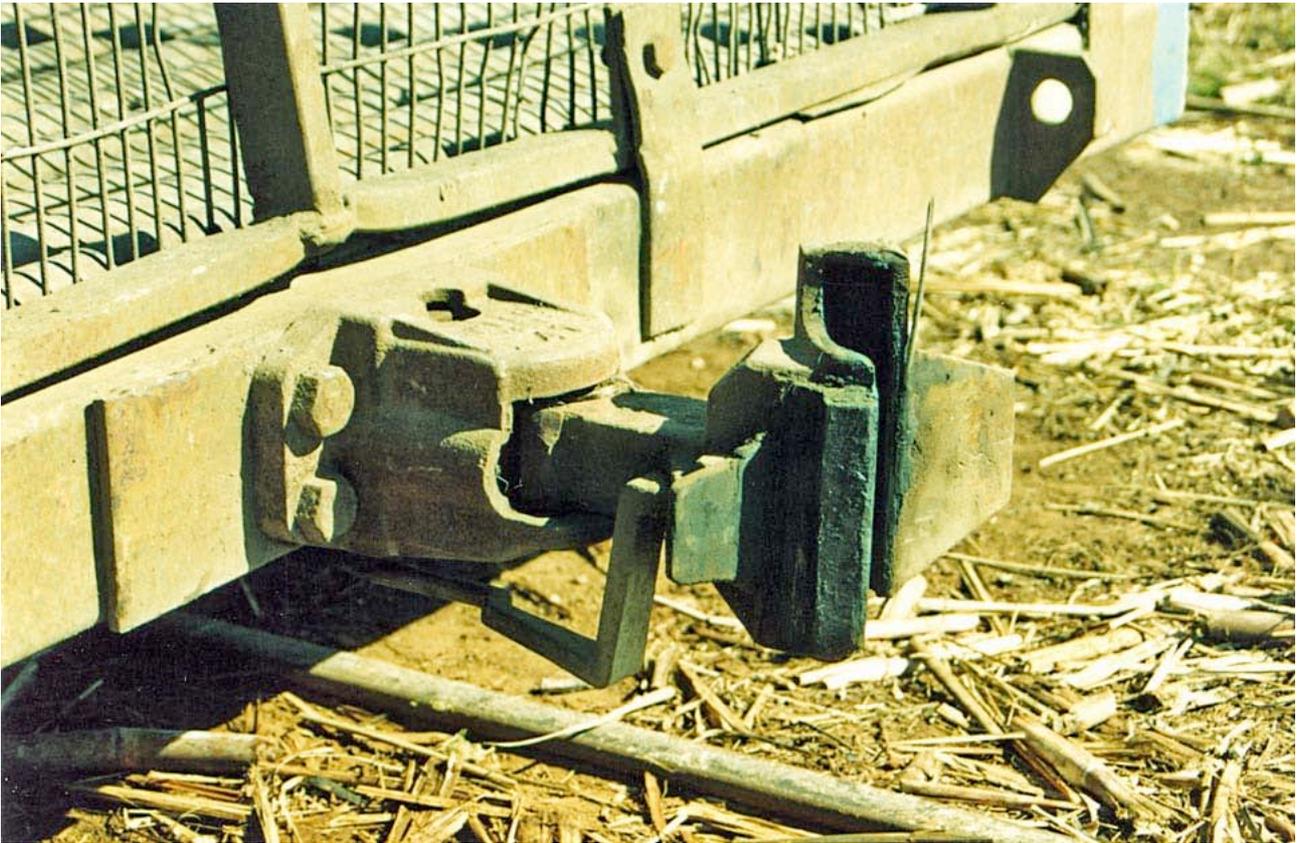
One type of Link and Pin coupling



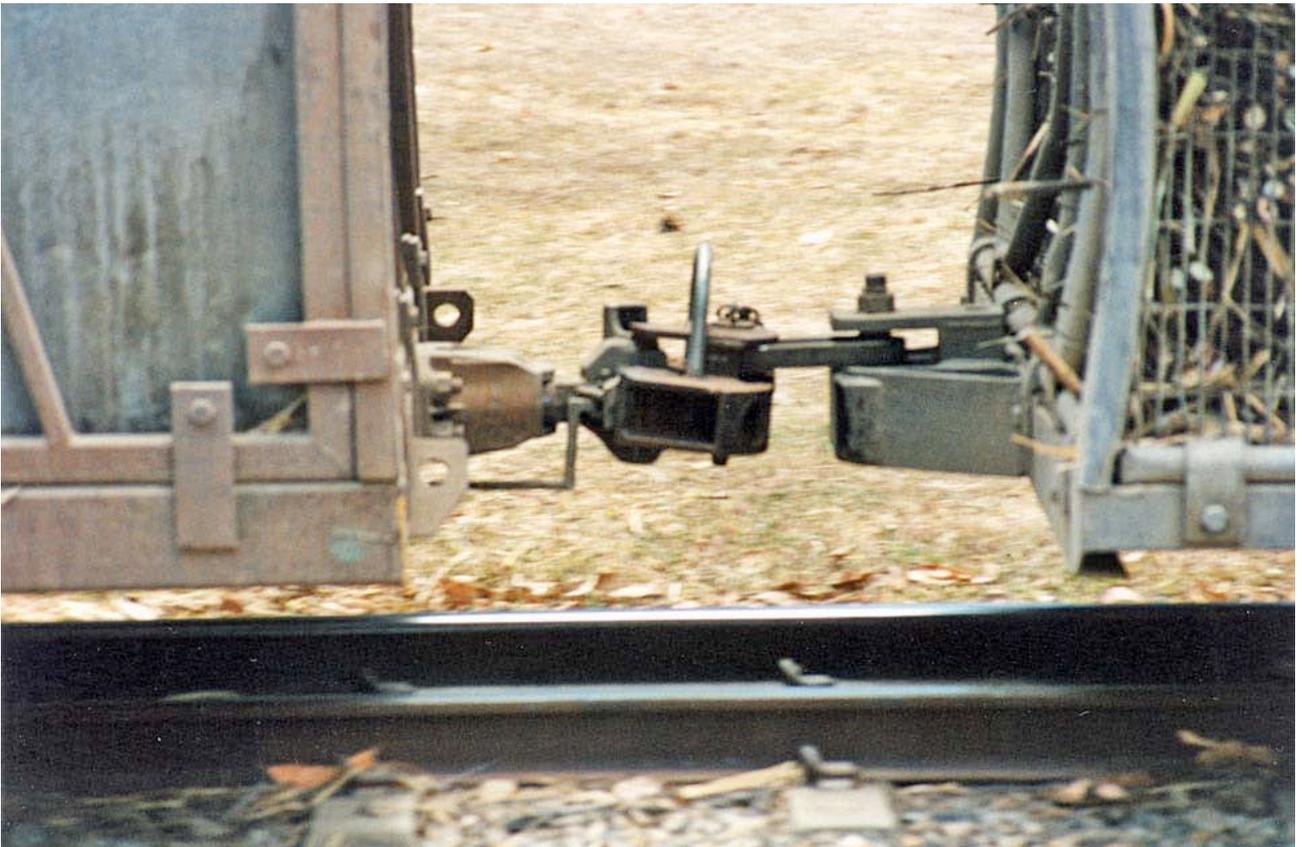
Another Link and Pin coupling variation.



Dumbbell or Chopper coupling



Knuckle or Auto coupling.



Transition: Link to Auto. T Badger, photographer



Transition: Dumbbell to Auto coupling.



One of three permanent link types which were trailed at Victoria Mill during the 2002 season.



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