Shipping



(McLean, G., 2009)

#### The era of steam

#### Steam - the engine of progress

In the 1860s sailing craft were still common, but from the 1870s steamers predominated. By the end of that decade they comprised more than half the coastal vessels and as much as 80% of coastal tonnage. Steam power brought new forms of business. Even in the 1860s steam mail services were being provided by McMeckan, Blackwood & Company, the Inter-Colonial Royal Mail, and the New Zealand Steam Navigation Company.

#### Paddle sloop

The first steam ship to visit New Zealand was a warship, the *Driver*, which reached Auckland in January 1846 to carry soldiers to Wellington. Like most early steamers she was essentially a sailing ship with big side paddles added.

The first big coastal company was the New Zealand Steam Navigation Company, formed at Wellington in 1862. It had six steamers by 1864, but even with public subsidies, the inefficiency of the early engines and the small size of the economy meant that it struggled to survive. The New Zealand Steam Shipping Company inherited some of its fleet, but by the mid-1870s the centre of shipping power had shifted south to Otago.

## The Union Steam Ship Company

The steam era created one local commercial giant, the Union Steam Ship Company of New Zealand Ltd. It traded for more than 120 years, and for much of that time it was the country's largest private employer.

The Union Company began in 1875 at Dunedin, then New Zealand's biggest and richest city. The driving force behind it, James Mills, had lived in Otago since 1849. He caught the attention of pioneer merchant Johnny Jones and before long he was running Jones's Harbour Steam Company. After Jones died in 1869, Mills, a trustee, delayed the sale of the fleet while he and his mates built up their stake in the business.

Mills knew that the railways would kill coastal shipping, so he ordered big, modern steamers for interisland trading. The company thrived thanks to his cunning and to British capital, especially that provided by Scottish shipbuilder and investor Peter Denny. Back in Dunedin, Mills's fellow directors, among them members of prestigious families, supplied local knowledge and contacts. In 1876 the Union Company took over its major rival, the New Zealand Steam Shipping Company. In Britain, ny persuaded the Albion Line to leave New Zealand's coastal trade



Aldinga speeding for Bluff, 1865



The Union Company's original fleet



Boarding the Wairarapa



The rakish Rotomahana



Engineers of the Monowai

## The Tasman trade

Then Mills pounced on the vital trade across the Tasman Sea to Australia. In 1876 Denny built the big Wakatipu for a friendly syndicate, and in 1877 the Rotorua made the company's first trans-Tasman voyage. In 1878 Union took over the main trans-Tasman shipping line, McMeckan, Blackwood & Company of Melbourne.

Between 1879 and 1882 Dennys built seven new liners for this route, each 1,700–2,000 tons. The Te Anau made more money, but the Rotomahana stood out. She was the world's first ship built of mild steel, and the first with bilge keels for stability. At 1,727 tons this Tasman Sea steamer dwarfed anything running between Britain and New Zealand. With her bowsprit, clipper bow and raked funnel and masts, the streamlined, 15-knot 'Greyhound of the Pacific' was great advertising for the new company.

#### Saving time

The Union Company made its money by offering its customers safe, high-quality services. Its first brand-new ships had been the 720-ton *Taupo* and the *Hawea*. That made them coastal giants in 1875, bigger than some of the immigrant ships that crossed the globe.

Before the 1870s many people derided steam ships as 'steam kettles' and wastefully inefficient coaleaters. The old single-cylinder reciprocating engine was very inefficient. But two-stage expansion, or compounding, with the steam passing first through a high-pressure and then a low-pressure cylinder, almost halved fuel consumption. It saved bunker space, stoker numbers and fuel costs. The *Hawea* and the *Taupo* introduced compound engines in 1875. By 1885 triple-expansion engines offered even greater fuel efficiency, enabling a ship to consume less than 60% of the coal of those built 10 years earlier.

Mills's steamers cut travelling times. In 1859 travellers would have been lucky to get from Auckland to Dunedin in less than 15 days. By 1879, by taking a Union Company steamer from Onehunga to Lyttelton and then transferring to a train at Christchurch, they could do the trip in five-and-a-half days. By 1898, by taking a steamer from Onehunga to New Plymouth, the train to Wellington, a steamer from Wellington to Lyttelton and then the train south, they could be in Dunedin in just three days.

# **Biographies**



Thomas Cawthron, 1833?-1915



George Fraser, 1832-1901



Alexander McGregor, 1828–1901



John Andrew Millar, 1855-1915



# James Mills, 1847–1936

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