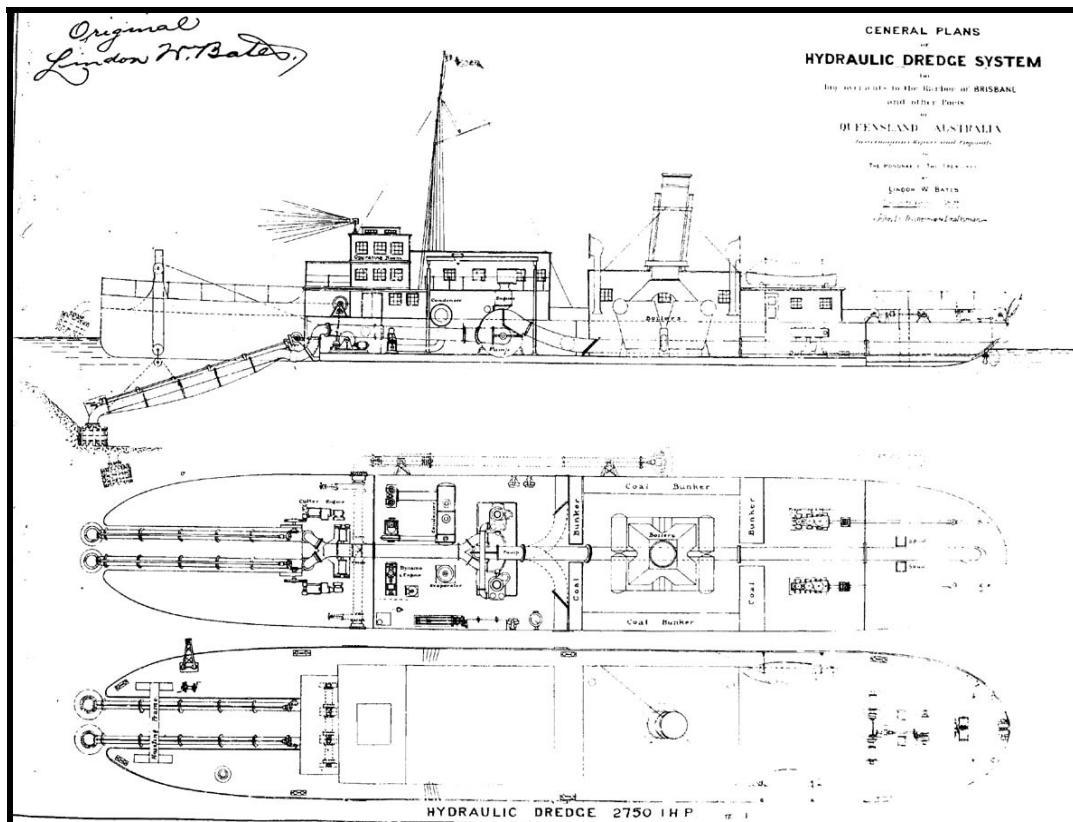
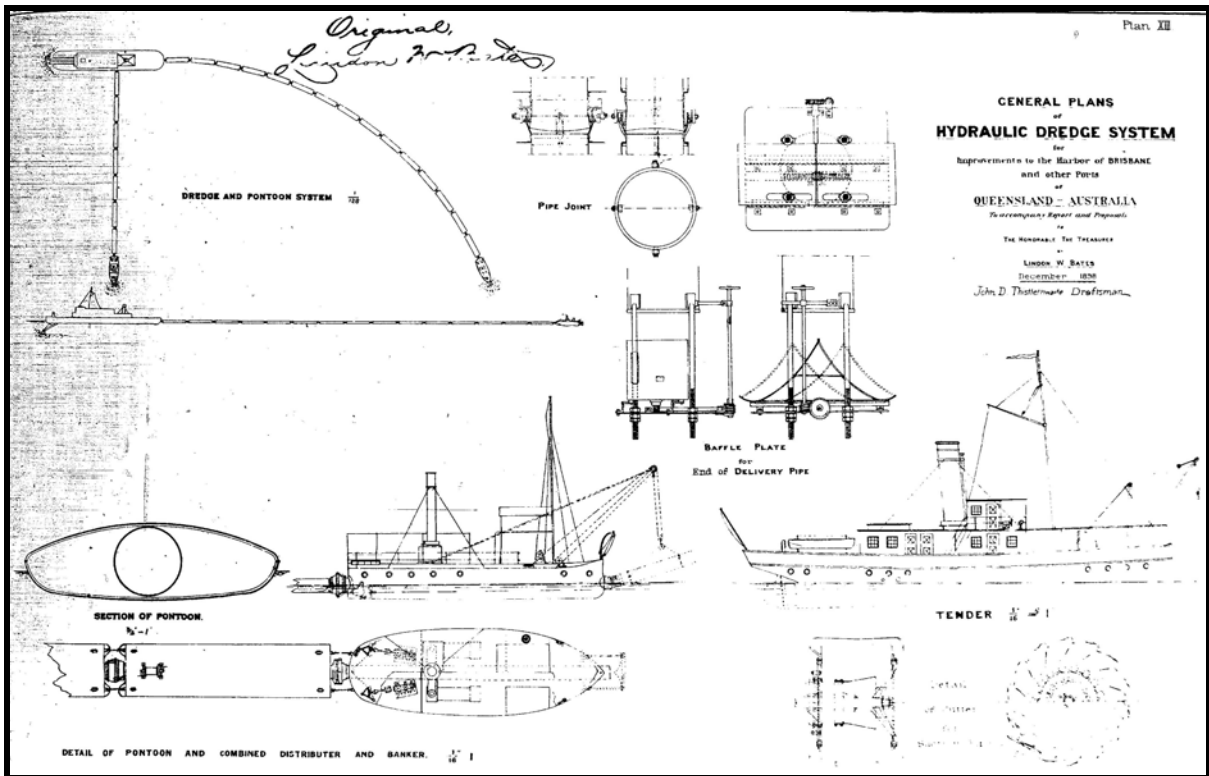


## Lindon Bates' plans for the Fitzroy

The American hydraulic specialist, Lindon W. Bates, was commissioned by the government to advise on Queensland rivers but the Rockhampton Harbour Board welcomed his opinion on the difficult river. The new dredge, to be built to his special patented design, was assembled in Britain under the supervision of former RHB chairman and private engineer, William Burns, and brought to Australia under its own steam. As the daily paper boasted on its arrival in 1901, *Archer* was the first such vessel of the 'Beta' class in Australia and 'the most powerful dredging machine south of the Equator'.<sup>1</sup> Admittedly, it was only a few months ahead of an identical dredger ordered by the harbour authority Brisbane, illustrated in the diagrams below.<sup>2</sup> According to one reporter who, on the dredge's arrival in Rockhampton described every inch of the massive workings for a public fascinated by technical detail, the vessel was 'as chock-a-block with machinery as a modern ironclad'.<sup>3</sup> It also resembled a warship in appearance rather than a conventional dredge because it had had to be seaworthy for the ocean voyage from Britain. As he noted, among a plethora of other specifications, *Archer* was 235 feet in length and boasted four Babcox and Wilcox marine boilers guaranteeing a dredging capacity of 2,500 cubic yards per hour.<sup>3</sup> With engines thundering and belching black smoke, and with the half-mile long discharge pipe rumbling and writhing on pontoons, *Archer* certainly would have resembled 'some extinct reptile of the sea'. In its first test in hard clay, the dredge easily disposed of lumps 'as large as a man's head', spewing them over No. 1 Wall.<sup>4</sup>

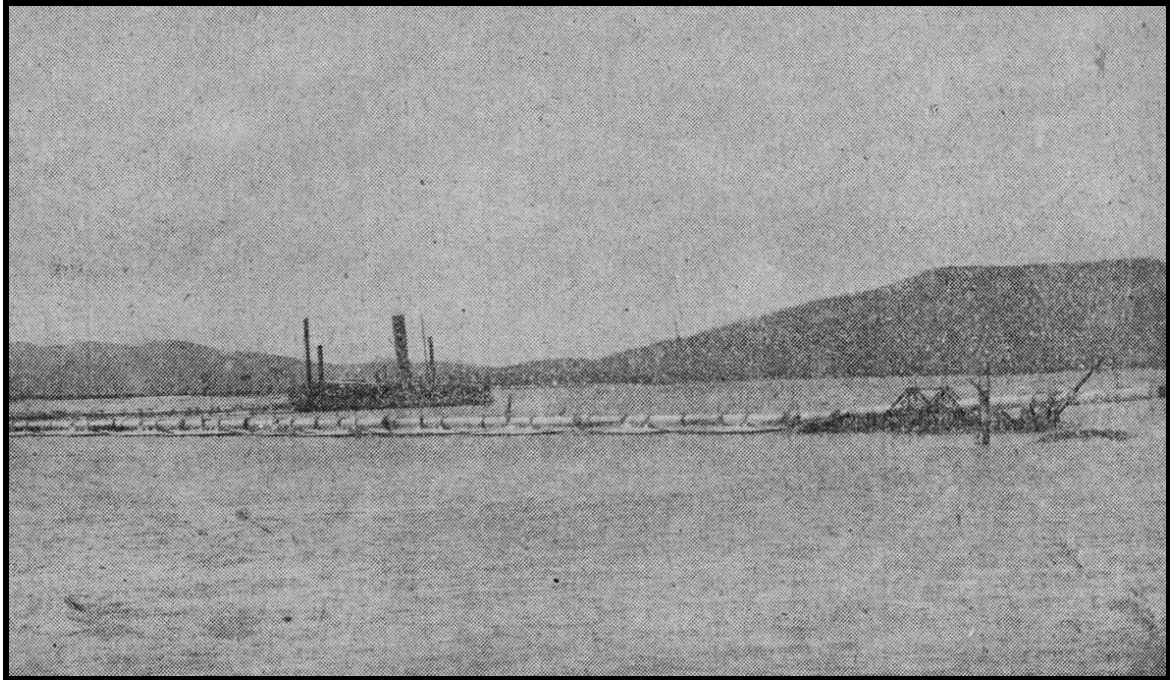




(QV&P 1898)

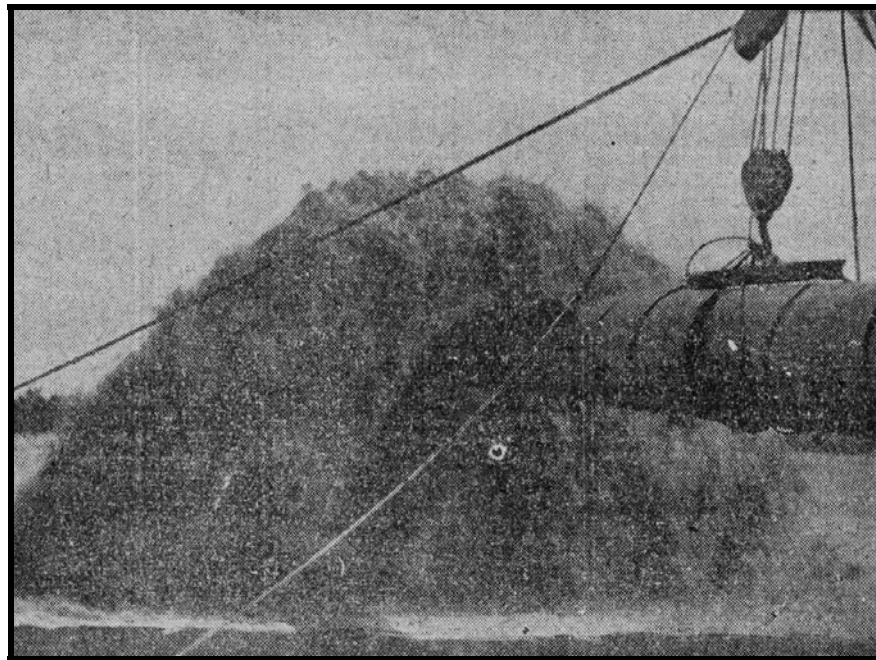


Dredge Archer and tender in Fitzroy (CCQC)



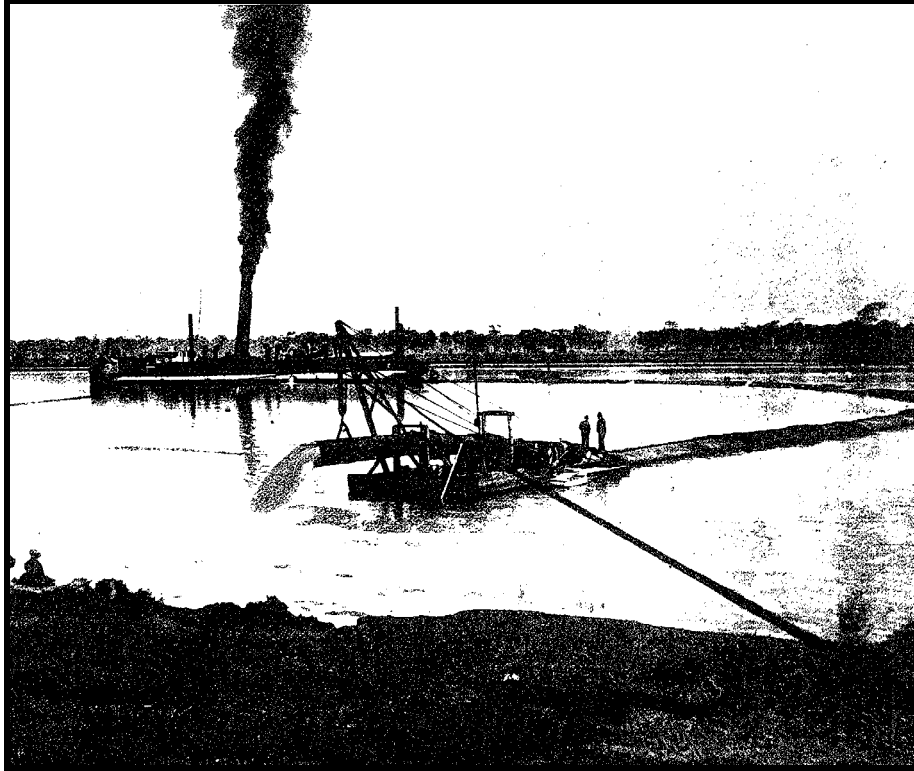
*Archer* and boom working in Fitzroy River.

(Rhodes, 1949)

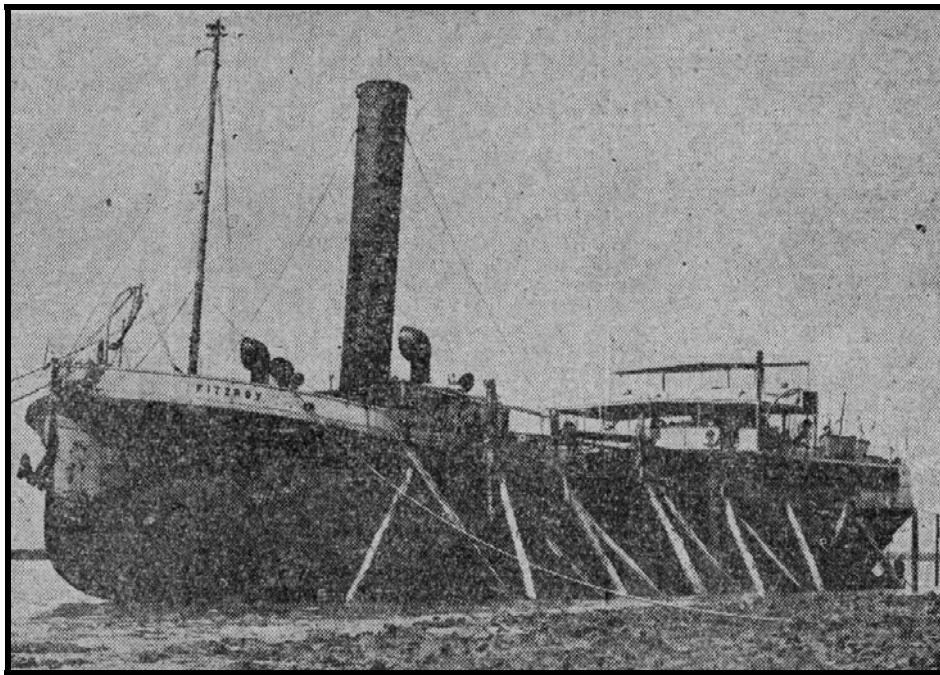


Dredge spoil from *Archer*.

(Rhodes, 1949)



*Archer at work in the Fitzroy (Capricornian)*



Archer's replacement, Fitzroy, on the gridiron for maintenance.  
(Rhodes, 1949)



Crew of *Fitzroy*

(CCQC)

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**References:**

1. *DR*, 4 February 1901.
2. 'Report on the Rivers and Harbours of Queensland with Projects for their Improvement and Designs and Proposals for applying to their Execution the Hydraulic Dredging System of Lindon W. Bates', *QV&P*, 1898, vol. 4, pp. 33-39.
3. *DR*, 26 March 1901.
4. *DR*, 26 March 1901.