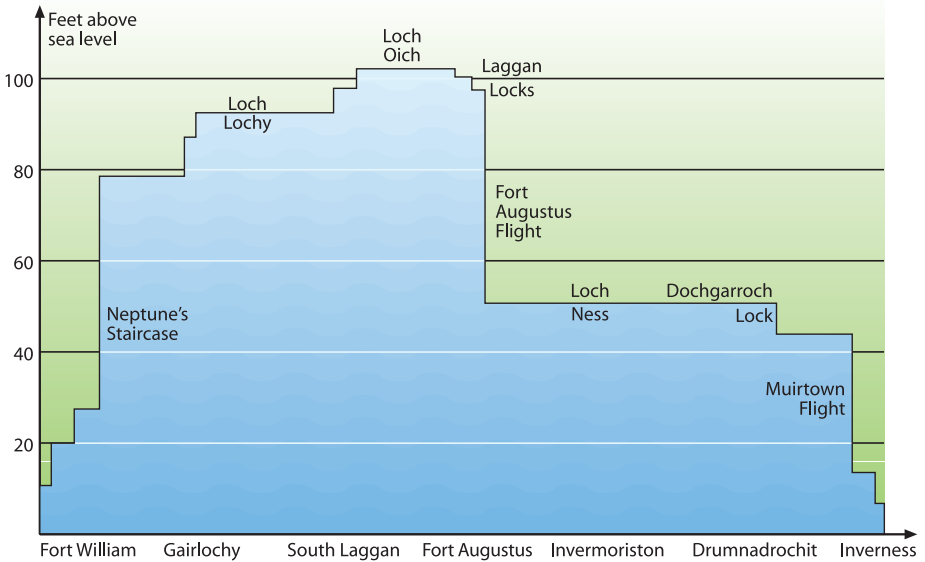


2·2 The Caledonian Canal

The geography of the Great Glen made the Caledonian Canal possible. Only 22 miles of this historic waterway are man-made, the other 38 relying on the natural waterways of Lochs Lochy, Oich and Ness. The Great Glen Way clings closely to the canal route all the way from Corpach to Fort Augustus, but does not rejoin it until the final approach to Inverness.

Its highest point is 106 feet above sea level (Loch Oich). Water drains from its southern end towards the Atlantic, and leaves its northern end towards the North Sea. Notice as you walk its length that the lock gates open in the opposite direction after the watershed. Lock gates are always angled so that the pressure of water at the higher level holds them closed.



The canal was first proposed in 1773, and was designed by two engineers, William Jessop and Thomas Telford, beginning in 1803. Jessop took on Telford, the son of a Dumfries-shire shepherd, as his assistant and although they worked on it jointly, Telford seems to be given most of the credit.

It was an ambitious venture, demanding the moving of huge amounts of material and creating work for up to 1200 labourers. Telford and Jessop had proposed a canal depth of 20 feet, but dredging problems restricted the depth to around 14 feet. It took 19 years to build, and cost £912,000 - a huge sum of money at the time. There were great celebrations when it finally opened in 1822.

Although the canal was built to create jobs and boost trade, its commercial use has never been great, partly because of the depth problem. It provided a safe passage for thousands of naval vessels during the first world war, but otherwise leisure craft became its main users. It was paid for entirely by public money and remains the earliest example of nationalised transport in Britain.



Lock gates opening at Fort Augustus

The canal has 29 locks, each of which raises or lowers the level by up to eight feet. Neptune's staircase, near Fort William, is the biggest flight of locks, lifting boats 64 feet in eight closely spaced locks (page 41).



Capstans were worked by leverage

Originally locks were worked by muscle power and leverage. The lock-keeper slotted a long wooden pole into each of the four outward-facing sockets. It took seven revolutions to open or close a lock gate. The poles were stored on top of the capstan in a tall pyramid supported by the other four sockets set into the top of the capstan. Although by 1968 all the locks had been mechanised, most of the capstans have been preserved.