

Heritage Trails, Martin Boyd, 1846-1918

### The Story

Martin Boyd, Harbour Master at Irvine, invented and patented the Automatic Tide Signalling Apparatus in 1905. The opening ceremony was on 23 May 1906. After the usual speeches, the official party travelled up the coast to Largs by steam paddle tug, returning, after being "suitably refreshed" at 22:00 hrs in order to see the apparatus operating at night. The most visible part of the system is the simple square four storey tower known locally as the 'Pilot House'. The invention gave an automatic solution to the problem of entering the harbour - the harbour bar had only seven feet of water, and nine and a half at spring tides.

There is a full description of this probably unique apparatus in [an article in Wikipedia](#). Within a chamber at the water's edge was a floating platform. As the tide rose, the platform rose and, by means of a cable, operated gearing and pulleys in the tower. By day, as the tide rose, balls suspended from the cross arm on the staff above the tower descended into the tower. At night, as the tide rose, 'eclipsers' extinguished the lower lights to indicate the greater depth of water. As the tide fell, the sign of black balls and, by night, lower lights, would warn sailors of the shallow water at the harbour bar.

Martin Boyd lived at 56 Harbour Street. He was reimbursed the sum of £60 to cover his expenses in building the apparatus. He is not mentioned in McJannet's 'Royal Burgh of Irvine' (1938). Strawhorn ('History of Irvine', p.174) has a photo showing Harbour Master Martin Boyd with harbour employees in 1901.

There was an earlier manual system in the 1830s, as described in a letter from a Wm Black to the 'Irvine Herald of Dec. 1891:

"Fifty-five years ago [c.1835] the sea washed up to the foot of the sand hills, which were then lying half-way between the Irvine harbour office and the pilot house. When the tide went out, it left large pools of water, and in the summer time children used to go there, and catch shrimps and flounders. On the top of some of these sand hills, was the signal station where the balls were hoisted indicating the depth of water on the bar, and an old man named Tom Tennant attended those balls, and also acted as ferryman across the river".