

Mystery tool baffles the history men

Something called a 'transit instrument' has been given to the East of Scotland local association's museum collection by the Lothian Regional Council drainage department. 'I am more than delighted that we have it, but I still do not know what it is' said chairman of the association's museum committee Roland Paxton.

The collection has now reached almost 100 items, a selection of which are on display at the Royal Museum of Scotland in Chambers Street, Edinburgh. But this is the first object that has entirely flummoxed Paxton, who is also a member of the ICE panel for historical civil engineering works. Gus Ferguson of the drainage department, who arranged for the transit instrument to be given to local association, also has no idea what it is, nor what its purpose was.

It was used on the Talla reservoir and aqueduct which was constructed between 1895 and 1905. And now Paxton has found it fully illustrated in the 1904 sales catalogue for Elliot Bros of Century Works, Lewisham in London. An engraving shows it mounted on an iron stand. The brass body, the only part of the instrument that remains, has a reflector to illuminate the axis, a lantern, diagonal eye piece, direct eye pieces of varying power, and axis level. It can move up and down, but not swivel.

It is shown in the surveying instrument section of the catalogue opposite a range of transit theodolites. Catalogue prices range between £30 and £55 for the transit instrument, and between £21 and £68 for transit theodolites.

It is clear, however, that it was not intended to take horizontal measurements. If readers of *NCE* have any idea what it was used for then Paxton would be very glad if they would write to the magazine. To help people he has provided the following note on the Talla scheme.

'It consisted of a gravity aqueduct to Edinburgh and a 4.8km long reservoir near Tweedsmuir with a capacity of 12.7M.m³. The aqueduct is 56km long, 1.8m to 2.3m wide with cast iron siphons under the rivers Tweed, Lyne and North Esks and has 21 tunnels totalling 14.5km.

Talla reservoir has a 320m wide earth dam with a core trench containing 61 160m³ of puddle clay brought to the site from Broughton by train wagons on a specially constructed 13km long railway. ■



Roland Paxton with mystery object, and page from 1904 catalogue (INSET).