

# The historic bridges of Peeblesshire

AN audience of more than 120 people enjoyed a riveting talk by Mr Roland Paxton on the bridges within a two-mile radius of Peebles High Street.

The talk, illustrated with many slides, was organised by the Peebles Civic Society and took place in the Burgh Hall on Wednesday, November 20.

Mr Paxton is a civil engineer with an interest in railway structures. He was invited by the Society to comment particularly on the Queen's Bridge near to Neidpath Castle, but widened his talk to include a number of other bridges.

He thought that the bridges of Peebles, and the Queen's Bridge, in particular, were so interesting that they could easily form part of a "heritage trail."

Although there were no less than 40 members of the Institute of Civil Engineers present, the speaker made sure that the lay members of the audience understood the basics of bridge building before he discussed in detail the more interesting bridges in Peeblesshire.

All the bridges in Peebles were of one of three basic types: the arch bridge, the beam bridge and the suspension bridge. The first relies on the compression of its building materials to remain intact, the second absorbs loads by bending and the third is supported by tension in the supporting wire ropes. There are no examples of the fourth type of bridge in Peebles, namely the cantilever, of which the Forth railway bridge is an example.

## Old Manor Brig

The speaker started his discussion of individual bridges in Peeblesshire with Old Manor Brig. This bridge, which is 12 ft. across was built in 1702. It is a fine early example of the arch type of bridge. Apart from minor repairs this bridge has not been modified since it was new and the speaker pleaded that it should be allowed to remain that way despite the fact that it is only 8 ft. wide and has a weight limit of only six tons. Another example of this type of bridge is Manor Bridge, which was built in 1882/83.

## Queen's Bridge

The Queen's Bridge, built in 1863, was described by the speaker as being one of the finest viaducts in Scotland. It has eight arches and

was designed by George Cunningham and Robert Murray. The latter, who lived in Damdale, Peebles, was the engineer. The speaker explained the difficulties building on the skew. The bridge is also built on a curve and the radius of the curve is  $\frac{1}{4}$  of a mile. Building a bridge simultaneously both on the skew and a curve adds considerably to the problems of design and construction. Mr Paxton had many photos of the bridge which showed the intricacies of design. He had also acquired a copy of a book containing Robert Murray's original calculations. The bridge was completed in 1877 and the railway track led into a tunnel which was built at the same time. This tunnel was also built on a curve.

## Tweed Bridge

The next bridge discussed was the one that is the most important for many people in Peebles — Tweed Bridge. There are records that show that a bridge was built over the Tweed in 1485. Tweed Bridge, which is also of the arch type, was only 8 ft. wide when it was first built and remained at this width until 1834 when it was widened to 20 ft. It was further widened to 40 ft. in 1900. The speaker noted that the widening stages can be easily seen under the bridge.

## Cuddy Bridge

Cuddy Bridge was the first example of a beam bridge discussed by the speaker. This bridge which was rebuilt in 1983 is designed to look like the arch bridge that it replaced. The original bridge was built in 1857.

## Other bridges

The "Tree Bridge," over the Cuddy in the Bridgegate, is much older, built in 1892, but is also an example of a beam bridge. This bridge clearly was not quite up to the job because some additional supports were added at a later date. It is due to be replaced by a stronger bridge in the not too distant future. It is probably called the "Tree Bridge" because the original structure was made of wood.

The audience was told that in 1810 Thomas Telford planned a horse-drawn railway along the north side of the river. At a later date, during the period of railway building madness, Peebles was suggested as the main junction town for railways from England to Edinburgh and Glasgow. Luckily this did not happen otherwise Peebles might have become a Scottish version of Swindon or Crewe.

The first suspension bridge shown was the Priorsford Bridge built in 1905. Originally this bridge was located very close to a beam bridge that carried the Caledonian railway over the Tweed. The piers of this latter bridge remained in place until the 1970s.

The wire bridge at Kingsmeadows which was built in 1817 survived until 1924. It was designed by a John Brown with money provided by Sir John Hay. This was the first example of a wire bridge in Britain; the latest example is the Dartford Bridge linking the M25 over the Thames.

Mr Paxton felt that the Queen's Bridge was in need of urgent waterproofing and that it would be worthwhile obtaining Scotrail's advice about forming a "heritage trust" to buy it and make it part of a "heritage trail" over the bridges of Peebles. He offered to write a "heritage trail guide" giving the history of the bridges. The audience clearly felt that this was a worthwhile project that should be pursued with vigour.

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Transcript

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