

## Tedstone Court Hydraulic RAM Pump

Manufactured by John Blake Ltd of Accrington, this RAM was installed at Tedstone Court, Tedstone Delamere, near Bromyard in 1929.

It was housed in a brick building in a steep sided valley, where it pumped water from a spring to a reservoir.

But the water scheme lasted less than 12 months as a heavy storm washed away the dam impounding the reservoir water and this RAM then sat in its sunken building for the next 70 years.



Recovery of the 1929 RAM from was not an easy task. It was located in a brick pit at the bottom of a remote steep-sided ravine, that was frequently filled with water. Nevertheless, an intrepid team of volunteer engineers were able to unbolt and rescue most of the key components, but it was almost a year later before they could recover its extremely heavy base-plate.

In May 1976 Major R Belville described the water supply system of the Tedstone Court Estate for the Museum Journal.

*By the 1920's demand for water had increased so another spring was tapped, but the old pump could not cope with the demand. With a big stream not far from the spring it was decided to pump it with a RAM.*

*In 1929 James Ward (Worcester) Ltd were asked to design and install a Blake hydro-ram with an 8" drive pipe laid half a mile from the stream to achieve the right fall. The spring water fell 90 ft to the RAM and was then pumped to the reservoir 400ft above.*

*In June 1930 there was a big storm and the stream flooded. This washed away the dam as it had been built without wings on it to divert water. The RAM still worked perfectly but the flood put my grandfather off the scheme and a Lister engine & pump was installed.*

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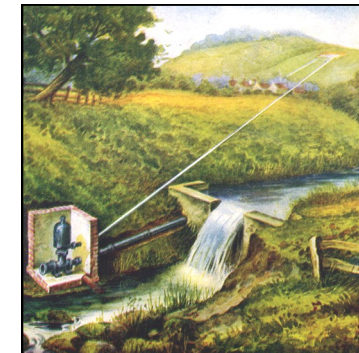


*The parts of the Tedstone RAM recovered in 2000*

This pump was offered to the Waterworks Museum by Mr Richard Bellville in 1999. It was placed on display in the Museum courtyard in 2006, after it was found it would not be possible to restore it to working order as a sufficient head of water could not be provided for this.

A RAM pump is an automatic pumping device used to move water to a height above its original source. It is mechanically very simple with just two moving parts. This makes it simple to build, easy to maintain - so very reliable, and capable of a long operational life.

A 'compound' RAM made use of a stream of water for its power to raise purer water from another source for domestic or agricultural use. This compares to a 'simple' RAM which uses one power source to pump water from the same water source.



*Illustration from a Blake's catalogue from the 1940s showing a ram powered by the fall of water from a shallow weir*



***More images of the recovery of the  
1929 Blake RAM***

## **More about the water supply systems at Tedstone Court**

The first water supply stem was installed in 1889 with the construction of a dam away from the main house. A Warner hydraulic RAM was driven from the pool which was created by the dam, which also held a lot of fish. This RAM pumped water to two big tanks over the stables supplying the servants quarters, farm buildings and stables. The house itself being supplied with water from various springs.

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**This 1889 Warner RAM is also on display at the  
Waterworks Museum in Bay-5 (Lower area)**

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During the next few years a 3 million gallon reservoir was built on the highest point of the estate and pipes were laid to farmhouses and cottages.

In 1905 a big spring was found in the main valley in the parish, located 300ft below the reservoir and a mile away. A Tangye pump was used to pump this water to the reservoir until it was replaced by the 1929 Blake RAM, when a second spring was opened up close by.

The 1889 Warner RAM kept working until the mid 1920's when the old dam started leaking, when it was replaced by a Lister pump which continued to be in operation until the 1960's when mains water arrived in the parish.



This hydraulic simple RAM was made by Robert Warner & Co in their foundry at Walton-on-the-Naze in Essex.

Source of information: an article written by Major Bellville in May 1976 for the Waterworks Museum Journal